

Washington State

# Actuarial Valuation Report

# 2004

By the Office of the State Actuary  
Prepared In: November 2005

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## WASHINGTON STATE LEGISLATURE

# Office of the State Actuary

Report of the Combined  
Actuarial Valuation  
As of September 30, 2004  
*November 2005*

As required under Chapter 41.45 RCW, this report documents the results of an actuarial valuation of the following Washington State retirement systems:

- Public Employees' Retirement System (PERS);
- Teachers' Retirement System (TRS);
- School Employees' Retirement System (SERS);
- Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF); and
- Washington State Patrol Retirement System (WSP).

The primary purpose of this valuation is to determine contribution requirements for the systems listed above as of the valuation date of September 30, 2004. The report is organized in the following four sections:

- Summary of Key Results
- Actuarial Exhibits
- Participant Data
- Appendices

The Summary of Key Results section provides a high-level executive summary of the valuation results for all systems combined. The remaining sections of the report provide detailed actuarial asset and liability information for each system and plan separately. The Appendices provide a summary of the principal actuarial assumptions and methods, summary of the major plan provisions, age-service distributions, historical data, and a glossary of actuarial terms used throughout this report.

We encourage you to submit any questions you might have concerning this report to our regular or e-mail address below. We also invite you to visit our web site (<http://osa.leg.wa.gov>) for further information regarding the actuarial funding of the Washington State retirement systems.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthew M. Smith".

Matthew M. Smith  
State Actuary

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$$L = \frac{1}{4} = \log_{10} 28' - 22.9290 - 29.2539 + 0.0684649 + 2$$

For the golden core  $N = 17$ . We have

$$\text{golden distance } (q) = r'; \cos \frac{1}{2}v', \text{ or}$$

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~~elements of the~~  $\log Q$

~~are~~ we have  $\sqrt{N} 487.5 + 98^{\circ} 54'$

# Summary of Key Results

# SUMMARY OF KEY RESULTS

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## Contribution Rates

Member and employer contribution rates determined from the actuarial valuation are expressed as a percentage of salary and summarized below along with comparable rates from the previous valuation. See the Actuarial Exhibits section of this report for the development of these rates.

	Contribution Rates			
	Plan 1		Plan 2/3	
	2004	2003	2004	2003
PERS				
Member*	6.00%	6.00%	3.42%	3.38%
Total Employer	5.65%	5.73%	5.65%	5.73%
TRS				
Member*	6.00%	6.00%	2.65%	2.48%
Total Employer**	5.96%	6.74%	5.96%	6.74%
SERS				
Member*	N/A	N/A	3.41%	3.51%
Total Employer	N/A	N/A	5.64%	7.56%
LEOFF				
Member	0.00%	0.00%	7.60%	7.20%
Employer	0.00%	0.00%	4.57%	4.32%
Total State	0.00%	0.00%	3.03%	2.88%
WSP				
Member	5.22%	4.51%	5.22%	4.51%
Employer (State)	5.22%	4.51%	5.22%	4.51%

\*Plan 3 members do not contribute to the defined benefit plan.

\*\*The TRS 1 UAAL rate for 2003 includes an additional 0.01% for the non-automatic post-retirement benefit increase provided under Chapter 85, Laws of 2004.

Employer rates exclude administrative expense rate.

## Contribution Rate-Setting Cycle

Under current Washington State law, in September of even-numbered years, the Pension Funding Council created under RCW 41.45.100 reviews the basic contribution rates recommended by the State Actuary based on an actuarial valuation performed on asset, participant and plan information compiled in odd-numbered years. The Pension Funding Council may adopt changes to economic assumptions and contribution rates by an affirmative vote of at least four members. The basic rates adopted by the Pension Funding Council will remain in place for the ensuing biennium, subject to revision by the Legislature.

RCW 41.45.070 requires that a temporary and supplemental contribution rate increase be charged to fund the cost of benefit enhancements that are enacted following the adoption of the basic rates by the Pension Funding Council. Supplemental contribution rates are included in the basic rates at the beginning of the next contribution rate-setting cycle.

## Funding Policy

The funding policy of the Legislature is contained in Chapter 41.45 RCW - Actuarial Funding of State Retirement Systems. RCW 41.45.010 outlines the intent to achieve the following goals:

- To provide a dependable and systematic process for funding the benefits to members and retirees of the Washington State Retirement Systems;
- To continue to fully fund the retirement system plans 2 and 3, and the Washington State Patrol Retirement System, as provided by law;
- To fully amortize the total cost of PERS 1, TRS 1 and LEOFF 1, not later than June 30, 2024;
- To establish long-term employer contribution rates which will remain a relatively predictable proportion of the future state budgets; and
- To fund, to the extent feasible, benefit increases over the working lives of those members so that the cost of those benefits are paid by the taxpayers who receive the benefit of those members' service.

No member or employer/state contributions are required for LEOFF 1 when the plan has no unfunded actuarial liability. See RCW 41.26.080(2).

Although not codified in law as a policy, the Legislature has established an additional funding policy through consistent legislative practice over time:

- Employers for each system are charged the same contribution rate, regardless of the plan in which employees hold membership (except for LEOFF).

Pension funding legislation was adopted during the 2005 legislative session (Chapter 370, Laws of 2005), which creates a short-term change in funding policy. The policy is to adopt annual contribution rates over a four-year "phase-in" period from 2005-09 (this will be reflected in the 2005 Actuarial Valuation Report), to suspend payments on the Plan 1 unfunded actuarial accrued liability (UAAL) in PERS and TRS during the 2005-07 biennium, and to delay recognition of the cost of future gain-sharing benefits until the 2007-09 biennium.

## Comments on 2004 Results

Short-term actuarial gains or losses occur when actual economic and demographic experience differs from what was assumed in the valuation. Actuarial gains will reduce contribution rates; whereas, actuarial losses will increase contribution rates. Under a reasonable set of actuarial assumptions and methods, actuarial gains and losses will offset over long-term experience periods.

Significant changes in plan provisions or actuarial assumptions and methods will also have an impact on contribution rates. Significant factors that impacted the results of this valuation include the following:

- The actual rate of investment return on the actuarial value of assets was below the assumed rate of 8%. Actual investment return was 4.49% (dollar weighted) for the plan year.
- The actual rate of investment return on the market value of assets was above the assumed rate of 8%. Actual investment return was 13.73% (time weighted) for the plan year.
- The exclusion of the liability associated with future gain-sharing benefits generated an actuarial gain (statutory change in funding policy).
- New entrants continue to exert a modest upward adjustment on current contribution rates; and
- A significant gain or loss can occur when actual salary experience is different from what is assumed. Actual experience for 2004 varied by system and plan. However, overall salary increases were less than assumed.

Please see the table, Actuarial Gains/Losses, in the Actuarial Exhibits section of this report for detailed gain and loss information by each individual system.

## Actuarial Liabilities

A summary of key measures of actuarial liability is shown below along with comparable information from last year's valuation. See the Actuarial Exhibits section of this report for a summary of actuarial liability by each individual system and plan. See the Glossary for a brief explanation of the actuarial terms.

Actuarial Liabilities		
(Dollars in millions)	2004	2003
All Systems		
Present Value of Fully Projected Benefits	\$55,710	\$55,074
Unfunded Actuarial Accrued Liability*	3,634	3,575
Present Value of Credited Projected Benefits	41,870	40,985
Valuation Interest Rate	8.00%	8.00%

\*For PERS 1, TRS 1 and LEOFF 1

## Assets

The market value of assets and actuarial (or smoothed) value of assets are shown below, for all plans combined, along with approximate rates of investment return. See the Actuarial Exhibits section of this report for a summary of assets by each individual system and plan as well as the development of the actuarial value of assets.

<b>Assets</b>		
<i>(Dollars in millions)</i>	<b>2004</b>	<b>2003</b>
<b>All Systems</b>		
Market Value of Assets	\$41,248	\$37,732
Actuarial Value of Assets	44,129	43,858
Contributions*	416	378
Disbursements	2,021	1,940
Investment Return	5,105	5,057
Other**	15	13
Rate of Return on Assets	13.73%	14.67%

\*Employee and Employer

\*\*Includes transfers, restorations, payables, etc.

## Funded Status

Several key measures of the combined systems' funded status are displayed below. Assets from an individual qualified retirement plan may not be used to fund benefits from another plan. This table, therefore, is provided for summarization purposes only. See the Actuarial Exhibits section of this report for a summary of funded status by each individual system and plan.

The present value of credited projected benefits was calculated under the Projected Unit Credit (PUC) cost method and is consistent with governmental accounting standards for the disclosure of a plan's funded status. The PUC cost method was not used to determine contribution requirements under this valuation. Please see Glossary for an explanation of PUC.

<b>Funded Status</b>		
<i>(Dollars in millions)</i>	<b>2004</b>	<b>2003</b>
<b>All Systems</b>		
a. Present Value of Credited Projected Benefits	\$41,870	\$40,985
b. Actuarial Value of Assets	44,129	43,858
c. Unfunded Liability (a-b)	(2,258)	(2,873)
d. Credited Projected Funded Ratio (b/a)	105%	107%

Totals may not agree due to rounding

## Participant Data

Participant data used in the actuarial valuation for the plan year ending September 30, 2004 are summarized below along with comparable information from last year's valuation. See the Participant Data section of this report for participant data summarized by each individual system and plan.

Participant Data		
All Systems	2004	2003
<b>Active Members</b>		
Number	289,403	286,469
Total Salaries (in millions)	\$12,893	\$12,527
Average Annual Salary	\$44,551	\$43,726
Average Attained Age	45.6	45.3
Average Service	10.5	10.3
<b>Retirees and Beneficiaries</b>		
Number	114,070	110,706
Average Annual Benefit	\$17,241	\$16,629
<b>Terminated Members</b>		
Number Vested	32,807	30,594
Number Non-Vested	94,821	95,845

## Key Assumptions

Key economic assumptions used in the actuarial valuation are displayed below. These assumptions were unchanged from the previous year's valuation. See the Appendix - Actuarial Assumptions and Methods for a detailed listing of the actuarial assumptions used in this valuation.

Key Assumptions		
All Systems		
Valuation Interest Rate	8.00%	
General Salary Increase	4.50%	
Inflation	3.50%	
Growth in Membership*	1.25%	

\*0.90% in TRS



# Actuarial Exhibits

$$L = \frac{1}{4} \log_{10}(2v' - 22929D) + 0.0684649 + 2$$

For the golden core  $N = 17$  we have

$$\text{golden distance } (q) = r'; \cos \frac{1}{2}v', \text{ or}$$

the packages. We have  $\frac{q}{N} = 25654$ .  
Log. cos.  $\frac{1}{2}v'$   
keewise Log.  $r'$

$$\text{Log. } \frac{16 - 1}{16 + 1} = \frac{30}{6960002}$$

$$qE = \frac{2}{0.4966525} = 2,$$

we E the application of the principle of the golden number  $N = 17$  gives us  $v' = 22.92$ .

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the formula  
 $P = \frac{54}{57.5} + 98^{\circ} 43' 48''$

# ACTUARIAL EXHIBITS

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## Actuarial Certification

This report documents the results of an actuarial valuation of the retirement plans defined under Chapters 41.26, 41.32, 41.35, 41.40 and 43.43 of the Revised Code of Washington (RCW). The primary purpose of this valuation is to determine contribution requirements for the systems listed above as of the valuation date of September 30, 2004 and should not be used for other purposes.

The valuation results summarized in this report involve calculations that require assumptions about future economic and demographic events. We believe that the assumptions and methods used in the underlying valuation are reasonable and appropriate for the primary purpose stated above. The use of another set of assumptions and methods, however, could also be reasonable and could result in materially different results.

The assumptions used in the valuations for investment return, inflation, salary and membership growth were prescribed by the Legislature in 2001. Demographic assumptions were developed from the 1995-2000 experience study performed by the Office of the State Actuary. The Legislature was responsible for the selection of the actuarial cost and asset valuation methods. In our opinion, all methods, assumptions and calculations are reasonable and are in conformity with generally accepted actuarial principles and standards as of the date of this publication.

The Department of Retirement Systems provided member and beneficiary data. We have checked the data for reasonableness as appropriate based on the purpose of the valuation. The State Investment Board, Department of Retirement Systems and the State Treasurer provided financial and asset information. An audit of the financial and participant data was not performed. We have relied on all the information provided as complete and accurate. In our opinion, this information is adequate and substantially complete for purposes of this valuation.

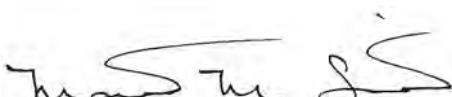
By law, the unfunded actuarial accrued liability (UAAL) in PERS and TRS Plans 1 must be amortized by June 30, 2024 as a level percentage of projected system payroll. The projected payroll includes pay from PERS, SERS and TRS Plans 2/3 as well as projected payroll from future new members. As a result of this amortization method, required dollar contributions to the Plan 1 UAAL will increase steadily as the amortization date approaches. Any continued delay of required Plan 1 UAAL payments will exacerbate this increase.

The asset smoothing method adopted during the 2003 legislative session (Chapter 11, Laws of 2003, E1) was intended to address the volatility of contribution rates under the aggregate funding method when used in combination with the existing asset allocation policy. The combination of the current asset smoothing method with any other funding method or asset allocation policy may not be appropriate.

Pension funding legislation was adopted during the 2005 legislative session (Chapter 370, Laws of 2005), which creates a short-term change in funding policy. The policy is to adopt annual contribution rates over a four-year "phase-in" period from 2005-09, to suspend payments on the Plan 1 UAAL in PERS and TRS during the 2005-07 biennium, and to delay recognition of the cost of future gain-sharing benefits until the 2007-09 biennium.

Future gain-sharing benefits represent a material liability that has been excluded from the results of this valuation. This was done as prescribed by legislation in 2005. The cost of future gain-sharing benefits, though excluded from the final results, are indicated in the Actuarial Gains and Losses and the Effects of Plan, Assumption and Method Changes sections of this report.

The undersigned, with actuarial credentials, meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.



Matthew M. Smith, EA, FCA, MAAA  
State Actuary



Philip Martin McCaulay, EA, FSA, MAAA  
Senior Pension Actuary

## Contribution Rates

Member and Employer Rate Summary				
	Plan 1		Plan 2/3	
	2004	2003	2004	2003
<b>PERS</b>				
Member*	6.00%	6.00%	3.42%	3.38%
Employer (Normal Cost)	3.42%	3.63%	3.42%	3.63%
Employer (Plan 1 UAAL)	2.23%	2.10%	2.23%	2.10%
Total Employer	5.65%	5.73%	5.65%	5.73%
<b>TRS</b>				
Member*	6.00%	6.00%	2.65%	2.48%
Employer (Normal Cost)	2.90%	3.94%	2.90%	3.94%
Employer (Plan 1 UAAL)**	3.06%	2.80%	3.06%	2.80%
Total Employer	5.96%	6.74%	5.96%	6.74%
<b>SERS</b>				
Member*	N/A	N/A	3.41%	3.51%
Employer (Normal Cost)	N/A	N/A	3.41%	5.46%
Employer (PERS Plan 1 UAAL)	N/A	N/A	2.23%	2.10%
Total Employer	N/A	N/A	5.64%	7.56%
<b>LEOFF</b>				
Member	0.00%	0.00%	7.60%	7.20%
Employer	0.00%	0.00%	4.57%	4.32%
State (Normal Cost)	0.00%	0.00%	3.03%	2.88%
State (Plan 1 UAAL)	0.00%	0.00%	0.00%	0.00%
Total State	0.00%	0.00%	3.03%	2.88%
<b>WSP</b>				
Member	5.22%	4.51%	5.22%	4.51%
Employer (State)	5.22%	4.51%	5.22%	4.51%

\*Plan 3 members do not contribute to the defined benefit plan.

\*\*The TRS 1 UAAL rate for 2003 includes an additional 0.01% for the non-automatic post-retirement benefit increase provided under Chapter 85, Laws of 2004.

### Development of Employer/State Rates

	PERS		TRS		SERS		LEOFF		WSP	
	Plan 1	Plan 2/3	Plan 1	Plan 2/3	Plan 2/3	Plan 1	Plan 2			
a. Total Normal Cost	9.42%	6.84%	8.90%	5.55%	6.82%	0.00%	15.20%	10.44%		
b. Member Normal Cost*	6.00%	3.42%	6.00%	2.65%	3.41%	0.00%	7.60%	5.22%		
c. Employer Contribution (a-b)	3.42%	3.42%	2.90%	2.90%	3.41%	0.00%	7.60%	5.22%		
d. Cost to Amortize UAAL	2.23%	2.23%	3.06%	3.06%	2.23%	0.00%	0.00%	N/A		
e. Total Employer Contribution Rate (c+d)**	5.65%	5.65%	5.96%	5.96%	5.64%	0.00%	4.57%	5.22%		

\*Plan 3 members do not contribute to the defined benefit plan.

\*\*The state pays 20% of the total normal cost for LEOFF 2. This reduces the total employer contribution rate from 7.60% to 4.57%.

**Development of Normal Cost Rates**

(Dollars in millions)	PERS 2/3	TRS 2/3	SERS 2/3	LEOFF 2	WSP
a. Actuarial Present Value of Fully Projected Benefits	\$15,288	\$5,256	\$2,126	\$4,737	\$739
b. Valuation Assets	11,431	\$4,138	1,630	2,947	660
c. Unfunded Fully Projected Benefits (a - b)	3,857	1,118	497	1,790	79
d. Employer Past Gain-Sharing Responsibility	0	86	0	N/A	N/A
e. Future Contribution Adjustment	0	0	0	0	0
f. Adjusted Unfunded (c - d - e)	\$3,857	\$1,031	\$497	\$1,790	\$79
Present Value of Projected Salaries to Current Members (PVS)					
g. Plan 1 PVS	N/A	N/A	N/A	N/A	\$698
h. Plan 2 PVS	52,036	3,889	4,143	12,159	55
i. Plan 3 PVS	8,853	31,107	6,265	N/A	N/A
j. Weighted PVS ( 2g + 2h + i)	\$112,924	\$38,885	\$14,550	\$24,318	\$1,506
k. Preliminary Normal Cost (2 * f / j)	6.84%	5.30%	6.82%	14.72%	10.44%
l. Change In Plan Provisions (Laws of 2005)	0.00%	0.00%	0.00%	0.48%	0.00%
m. 100% Normal Cost (k + l)	6.84%	5.30%	6.82%	15.20%	10.44%
n. 50% Normal Cost (m x 50%)	3.42%	2.65%	3.41%	7.60%	5.22%
o. Employer Past Gain-sharing Responsibility (d / (h + i))	0.00%	0.25%	0.00%	N/A	N/A
p. Employee Contribution Rate (n) <sup>1,2,3</sup>	3.42%	2.65%	3.41%	7.60%	5.22%
q. Employer Contribution Rate (n + o) <sup>2,3</sup>	3.42%	2.90%	3.41%	4.57%	5.22%
r. State Contribution Rate <sup>2</sup>	N/A	N/A	N/A	3.03%	N/A
s. Total Contribution Rate (p + q + r)	6.84%	5.55%	6.82%	15.20%	10.44%

Note: Totals may not agree due to rounding

<sup>1</sup>Plan 3 members do not contribute to the defined benefit plan

<sup>2</sup>LEOFF 2 rate: 50% Employee, 30% Employer, 20% State

<sup>3</sup>WSP employees pay 50% of the total normal cost, but not less than 2%. The employer pays the excess (if any).

**Amortization of the Plan 1 Unfunded Actuarial Accrued Liability (UAAL)**

(Dollars in millions)	PERS 1	TRS 1	LEOFF 1
a. Actuarial Present Value of Fully Projected Benefits	\$12,818	\$10,358	\$4,321
b. Valuation Assets	9,928	8,728	4,666
c. Actuarial Present Value of Future Normal Costs	327	215	0
d. UAAL (a-b-c)	2,563	1,415	(345)
e. Expected UAAL Contributions to 2007	0	0	0
f. Remaining UAAL (d-e)	\$2,563	\$1,415	(345)
g. Amortization Date	6/30/2024	6/30/2024	6/30/2024
h. Present Value of Projected Salaries beyond 2007	\$115,069	\$46,320	\$15,114
i. Preliminary Rate (f/g)*	2.23%	3.06%	(2.28%)
j. Change In Plan Provisions (Laws of 2005)	0.00%	0.00%	0.05%
K. Contribution Rate to Amortize the UAAL (i+j)*	2.23%	3.06%	(2.23%)

Note: Totals may not agree due to rounding

\*No Plan 1 UAAL contributions are required when the plan is fully funded under current methods and assumptions.

## Actuarial Liabilities

### Present Value of Fully Projected Benefits

(Dollars in millions)	PERS			TRS		
	Plan 1	Plan 2/3	Total	Plan 1	Plan 2/3	Total
<b>Active Members</b>						
Retirement	\$3,791	\$12,377	\$16,168	\$2,937	\$4,623	\$7,561
Termination	24	466	490	12	123	134
Death	25	113	138	13	55	68
Disability	28	101	129	7	5	12
Return of Contributions on Termination	12	245	257	1	5	6
Return of Contributions on Death	31	138	169	18	11	30
Portability	8	39	46	9	5	14
Uniform Cola	345	N/A	345	260	N/A	260
<b>Total Active</b>	<b>\$4,263</b>	<b>\$13,479</b>	<b>\$17,742</b>	<b>\$3,257</b>	<b>\$4,827</b>	<b>\$8,084</b>
<b>Inactive Members</b>						
Terminated	\$249	\$791	\$1,041	\$189	\$234	\$424
Service Retired	6,880	924	7,804	5,767	184	5,950
Disability Retired	111	52	163	93	5	98
Survivors	385	43	428	220	5	226
Uniform Cola	929	N/A	929	832	N/A	832
<b>Total Inactive</b>	<b>\$8,555</b>	<b>\$1,810</b>	<b>\$10,364</b>	<b>\$7,101</b>	<b>\$429</b>	<b>\$7,530</b>
Laws of 2005	0	(8)	(8)	2	0	2
<b>2004 Total</b>	<b>\$12,818</b>	<b>\$15,280</b>	<b>\$28,099</b>	<b>\$10,360</b>	<b>\$5,256</b>	<b>\$15,616</b>
<b>2003 Total</b>	<b>\$12,715</b>	<b>\$14,159</b>	<b>\$26,874</b>	<b>\$10,341</b>	<b>\$4,876</b>	<b>\$15,217</b>

Note: Totals may not agree due to rounding.

**Present Value of Fully Projected Benefits**

(Continued)

(Dollars in millions)	SERS		LEOFF		WSP
	Plan 2/3	Plan 1	Plan 2	Total	
<b>Active Members</b>					
Retirement	\$1,736	\$380	\$4,314	\$4,695	\$371
Termination	119	0	77	77	2
Death	19	5	15	19	4
Disability	11	177	22	199	0
Return of Contributions on Termination	19	0	72	72	2
Return of Contributions on Death	10	2	40	42	2
Portability	6	0	4	4	0
Uniform Cola	N/A	N/A	N/A	N/A	N/A
<b>Total Active</b>	<b>\$1,919</b>	<b>\$564</b>	<b>\$4,544</b>	<b>\$5,108</b>	<b>\$382</b>
<b>Inactive Members</b>					
Terminated	\$105	\$5	\$84	\$89	\$3
Service Retired	96	1,353	97	1,450	333
Disability Retired	4	2,008	8	2,016	1
Survivors	2	392	4	396	19
Uniform Cola	N/A	N/A	N/A	N/A	N/A
<b>Total Inactive</b>	<b>\$207</b>	<b>\$3,758</b>	<b>\$193</b>	<b>\$3,950</b>	<b>\$357</b>
Laws of 2005	0	9	63	72	0
2004 Total	\$2,126	\$4,330	\$4,800	\$9,130	\$739
2003 Total	\$1,979	\$4,342	\$4,383	\$8,724	\$727

Note: Totals may not agree due to rounding.

**Present Value of Credited Projected Benefits**

(Dollars in millions)	PERS			TRS		
	Plan 1	Plan 2/3	Total	Plan 1	Plan 2/3	Total
<b>Active Members</b>						
Retirement	\$3,228	\$6,102	\$9,330	\$2,541	\$2,177	\$4,718
Termination	20	258	278	10	64	74
Death	21	58	78	11	26	38
Disability	23	55	78	6	3	9
Return of Contributions on Termination	9	130	139	1	3	4
Return of Contributions on Death	26	74	100	15	7	22
Portability	6	19	26	8	2	10
Uniform Cola	293	N/A	293	225	N/A	225
<b>Total Active</b>	<b>\$3,627</b>	<b>\$6,695</b>	<b>\$10,323</b>	<b>\$2,817</b>	<b>\$2,282</b>	<b>\$5,100</b>
<b>Inactive Members</b>						
Terminated	\$249	\$791	\$1,041	\$189	\$234	\$424
Service Retired	6,880	924	7,804	5,767	184	5,950
Disability Retired	111	52	163	93	5	98
Survivors	385	43	428	220	5	226
Uniform Cola	929	N/A	929	832	N/A	832
<b>Total Inactive</b>	<b>\$8,555</b>	<b>\$1,810</b>	<b>\$10,364</b>	<b>\$7,101</b>	<b>\$429</b>	<b>\$7,530</b>
Laws of 2005	0	(1)	(1)	2	0	2
2004 Total	\$12,182	\$8,504	\$20,686	\$9,920	\$2,711	\$12,631
2003 Total	\$11,974	\$7,606	\$19,580	\$9,813	\$2,414	\$12,228

Note: Totals may not agree due to rounding.

**Present Value of Credited Projected Benefits**

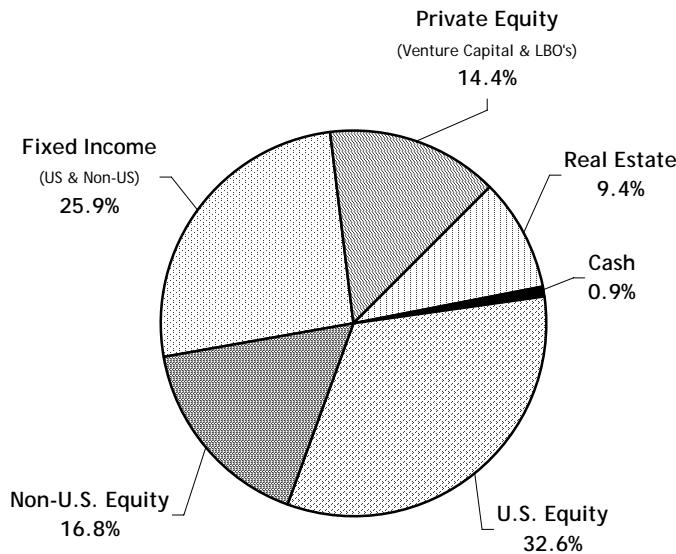
(Continued)

(Dollars in millions)	SERS		LEOFF		WSP
	Plan 2/3	Plan 1	Plan 2	Total	
<b>Active Members</b>					
Retirement	\$882	\$346	\$2,177	\$2,523	\$198
Termination	66	0	43	43	1
Death	10	4	8	12	2
Disability	6	162	12	175	0
Return of Contributions on Termination	11	0	39	39	1
Return of Contributions on Death	5	1	21	22	1
Portability	3	0	2	2	0
Uniform Cola	N/A	N/A	N/A	N/A	0
<b>Total Active</b>	<b>\$984</b>	<b>\$514</b>	<b>\$2,302</b>	<b>\$2,816</b>	<b>\$204</b>
<b>Inactive Members</b>					
Terminated	\$105	\$5	\$82	\$87	\$3
Service Retired	96	1,353	97	1,450	333
Disability Retired	4	2,008	8	2,016	1
Survivors	2	392	4	396	19
Uniform Cola	N/A	N/A	N/A	N/A	N/A
<b>Total Inactive</b>	<b>\$207</b>	<b>\$3,758</b>	<b>\$191</b>	<b>\$3,948</b>	<b>\$357</b>
Laws of 2005	0	9	29	38	0
<b>2004 Total</b>	<b>\$1,191</b>	<b>\$4,281</b>	<b>\$2,521</b>	<b>\$6,802</b>	<b>\$560</b>
<b>2003 Total</b>	<b>\$1,051</b>	<b>\$4,282</b>	<b>\$2,194</b>	<b>\$6,476</b>	<b>\$540</b>

Note: Totals may not agree due to rounding.

## Plan Assets

Retirement Commingled Trust Fund (CTF) Asset Allocation



**Cash:** Money held while being transferred between investments or placed temporarily in an interest-bearing account.

**U.S. Fixed Income:** U.S. Treasury and government bonds; investment-grade corporate bonds; publicly traded mortgage-backed securities; mortgages; asset-backed and convertible securities.

**Non-U.S. Fixed Income:** Foreign government bonds.

**U.S. Equity:** Stock in U.S. companies.

**Non-U.S. Equity:** Stock in foreign companies.

**Venture Capital:** Equity financing of early expansion and later-stage growth of small businesses.

**Leveraged Buy-outs (LBOs):** The purchase of all assets or stock in a company using borrowed funds.

**Real Estate:** Office and retail space; apartments; warehouses; hotels; etc.

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**Change in Market Value of Assets**


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(Dollars in millions)	PERS			TRS		
	Plan 1	Plan 2/3	Total	Plan 1	Plan 2/3	Total
	Fund 631	Fund 641		Fund 632	Fund 642	
2003 Market Value	\$8,730	\$9,461	\$18,191	\$7,358	\$3,315	\$10,673
Revenue						
Contributions						
Employee	56	62	118	41	4	45
Employer/State	21	72	93	10	32	42
Total Contributions	77	134	211	51	36	87
Investment Return	1,163	1,300	2,462	982	456	1,437
Restorations	5	3	8	3	1	4
Transfers In	0	0	0	0	0	1
Miscellaneous	0	0	0	0	0	0
Total Revenue	\$1,245	\$1,436	\$2,681	\$1,036	\$492	\$1,529
Disbursements						
Monthly Benefits*	\$841	\$91	\$932	\$711	\$14	\$725
Refunds	5	27	32	2	3	5
Total Benefits	846	117	964	712	17	730
Transfers Out	0	3	3	0	1	1
Expenses	0	0	1	0	0	0
Total Disbursements	\$847	\$121	\$967	\$713	\$18	\$731
Payables	\$0	\$0	\$0	\$0	\$0	\$0
2004 Market Value	\$9,128	\$10,776	\$19,905	\$7,681	\$3,789	\$11,470
2004 Actuarial Value	\$9,928	\$11,431	\$21,359	\$8,728	\$4,138	\$12,866
Ratio	109%	106%	107%	114%	109%	112%

Note: Totals may not agree due to rounding.

\*TRS 1 value includes annuity cashouts.

**Change in Market Value of Assets**

(Continued)

(Dollars in millions)	SERS				WSP Fund 615	
	LEOFF					
	Plan 2/3 Fund 633	Plan 1 Fund 819	Plan 2 Fund 829	Total		
2003 Market Value	\$1,339	\$4,380	\$2,541	\$6,921	\$608	
Revenue						
Contributions						
Employee	4	(0)	51	51	1	
Employer/State	10	0	52	52	0	
Total Contributions	14	0	103	103	1	
Investment Return	184	589	351	940	82	
Restorations	0	0	1	1	0	
Transfers In	1	0	0	0	0	
Miscellaneous	0	0	0	0	0	
Total Revenue	\$199	\$589	\$455	\$1,044	\$84	
Disbursements						
Monthly Benefits	8	274	7	280	26	
Refunds	2	0	5	5	0	
Total Benefits	10	274	12	286	26	
Transfers Out	0	0	0	0	0	
Expenses	0	0	0	0	0	
Total Disbursements	\$10	\$274	\$12	\$286	\$26	
Payables	\$0	\$0	\$0	\$0	\$0	
2004 Market Value	\$1,529	\$4,695	\$2,984	\$7,679	\$665	
2004 Actuarial Value	\$1,630	\$4,666	\$2,947	\$7,613	\$660	
Ratio	107%	99%	99%	99%	99%	

Note: Totals may not agree due to rounding.

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**Calculation of Actuarial Value of Assets**


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(Dollars in Millions)	PERS 1	PERS 2/3*	TRS 1	TRS 2/3*	SERS 2/3*	LEOFF 1	LEOFF 2	WSP
a. Market Value at 9/30/2004	\$9,128	\$10,776	\$7,681	\$3,789	\$1,529	\$4,695	\$2,984	\$665
b. Deferred Gains and (Losses)								
<u>Plan Year Ending</u>	<u>Percent Deferred</u>							
9/30/2004	83.33%	413	453	349	159	64	208	121
9/30/2003	75.00%, 71.43%**	392	434	332	153	62	206	116
9/30/2002	62.50%	(782)	(782)	(662)	(271)	(109)	(385)	(200)
9/30/2001	50.00%	(824)	(760)	(1,066)	(390)	(118)	0	0
Total Deferral		(\$800)	(\$655)	(\$1,047)	(\$349)	(\$101)	\$29	\$37
c. Market Value less Deferral (a-b)	\$9,928	\$11,431	\$8,728	\$4,138	\$1,630	\$4,666	\$2,947	\$660
d. 70% of Market Value of Assets	\$6,390	\$7,544	\$5,377	\$2,652	\$1,070	\$3,286	\$2,089	\$466
e. 130% of Market Value of Assets	\$11,867	\$14,009	\$9,986	\$4,926	\$1,987	\$6,103	\$3,879	\$865
f. Actuarial Value of Assets***	\$9,928	\$11,431	\$8,728	\$4,138	\$1,630	\$4,666	\$2,947	\$660

Note: Totals may not agree due to rounding.

\*Defined Benefit portion only.

\*\*PERS Plan 1 and TRS Plan 1 = 71.43% deferred; All other plans = 75.00% deferred.

\*\*\*Actuarial Value of Assets can never be less than 70% or greater than 130% of the market value of assets.

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**Investment Gains and (Losses) for Prior Year**


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(Dollars in Millions)	PERS 1	PERS 2/3*	TRS 1	TRS 2/3*	SERS 2/3*	LEOFF 1	LEOFF 2	WSP
a. 2003 Market Value (at SIB)	\$ 8,726	\$ 9,453	\$ 7,353	\$ 3,312	\$ 1,339	\$ 4,379	\$ 2,533	\$ 608
b. Total Cash Flow	(767)	17	(658)	19	5	(274)	93	(25)
c. 2004 Market Value (at SIB)	9,123	10,770	7,677	3,787	1,528	4,693	2,978	665
d. Actual return (c-b-a)	\$ 1,164	\$ 1,301	\$ 982	\$ 456	\$ 184	\$ 589	\$ 352	\$ 82
e. Weighted asset amount	\$ 8,350	\$ 9,462	\$ 7,049	\$ 3,321	\$ 1,341	\$ 4,243	\$ 2,580	\$ 595
f. Expected return (8% x e)	668	757	564	266	107	339	206	48
g. Investment Gain/(Loss) for Prior Year (d-f)	496	544	418	191	77	250	145	35
h. Dollar weighted rate of return	13.93%	13.75%	13.93%	13.74%	13.74%	13.88%	13.64%	13.83%

Note: Totals may not agree due to rounding.

\*Defined Benefit portion only.

## Funded Status

Funded Status on an Actuarial Value Basis										
(Dollars in millions)	PERS		TRS		SERS		LEOFF		WSP	Total
	Plan 1	Plan 2/3	Plan 1	Plan 2/3	Plan 2/3	Plan 1	Plan 2			
Credited Projected Liability	\$12,182	\$8,504	\$9,920	\$2,711	\$1,191	\$4,281	\$2,521	\$560	\$41,870	
Valuation Assets	\$9,928	\$11,431	\$8,728	\$4,138	\$1,630	\$4,666	\$2,947	\$660	\$44,129	
Unfunded Liability	\$2,254	(\$2,927)	\$1,192	(\$1,427)	(\$439)	(\$385)	(\$426)	(\$100)	(\$2,258)	
Funded Ratio:										
2004 *	81%	134%	88%	153%	137%	109%	117%	118%	105%	
2003 *	82%	142%	89%	155%	138%	112%	125%	123%	107%	
2002 *	92%	158%	98%	182%	169%	119%	137%	135%	118%	
2001 *	97%	179%	100%	197%	197%	129%	154%	147%	126%	
2000 *	98%	190%	100%	196%	170%	136%	161%	152%		
1999	93%	189%	93%	188%	N/A	125%	154%	159%		
1998	86%	191%	86%	185%	N/A	117%	160%	147%		
1997 *	83%	187%	82%	181%	N/A	108%	155%	140%		
1996	73%	157%	70%	144%	N/A	89%	130%	128%		
1995	68%	150%	65%	136%	N/A	80%	126%	119%		
1994 *	67%	142%	65%	130%	N/A	68%	124%	110%		
1993	70%	142%	62%	126%	N/A	68%	127%	110%		
1992	67%	139%	59%	127%	N/A	65%	128%	108%		
1991	67%	149%	59%	131%	N/A	66%	154%	106%		
1990	66%	154%	60%	140%	N/A	65%	153%	105%		
1989 *	65%	162%	58%	144%	N/A	65%	158%	103%		
1988	66%	165%	59%	143%	N/A	66%	153%	102%		
1987	71%	175%	58%	135%	N/A	69%	157%	95%		
1986	63%	162%	50%	125%	N/A	57%	142%	87%		

Note: Totals may not agree due to rounding.

\*Assumptions and/or method change.

Funded Status on a Market Value Basis*										
(Dollars in millions)	PERS		TRS		SERS		LEOFF		WSP	Total
	Plan 1	Plan 2/3	Plan 1	Plan 2/3	Plan 2/3	Plan 1	Plan 2			
Credited Projected Liability	\$15,594	\$13,473	\$12,845	\$4,498	\$1,881	\$5,717	\$4,146	\$814	\$58,968	
Market Value of Assets	\$9,128	\$10,776	\$7,681	\$3,789	\$1,529	\$4,695	\$2,984	\$665	\$41,248	
Unfunded Liability	\$6,466	\$2,696	\$5,163	\$709	\$353	\$1,022	\$1,162	\$149	\$17,720	
Funded Ratio:										
2004	59%	80%	60%	84%	81%	82%	72%	82%	70%	

\*Liabilities have been valued using an interest rate of 5.5% while assets have been valued at market value.

## Actuarial Gains/Losses

### Change in Employer and State Contribution Rate by Source

	PERS	TRS	SERS	LEOFF	WSP
<b>Change in Employer Rate</b>					
2003 Contribution Rate	5.73%	6.74%	7.56%	0.03%	4.51%
Minus the Rate for Future Gain-Sharing	(0.65%)	(2.01%)	(2.35%)	N/A	N/A
<b>2003 Adjusted Contribution Rate</b>	5.08%	4.73%	5.21%	0.03%	4.51%
Economic Gains/Losses	0.40%	1.03%	0.22%	1.05%	1.12%
Demographic Gains/Losses	0.05%	(0.12%)	(0.09%)	0.02%	(0.20%)
Other Gains/Losses	0.12%	0.32%	0.30%	(0.44%)	(0.21%)
Total Change	0.57%	1.23%	0.43%	0.63%	0.71%
<b>2004 Preliminary Contribution Rate</b>	5.65%	5.96%	5.64%	0.66%	5.22%
Laws of 2005 Applied to 2004	0.00%	0.00%	0.00%	0.14%	0.00%
<b>2004 Adjusted Contribution Rate</b>	5.65%	5.96%	5.64%	0.80%	5.22%
Additional Rate for Future Gain-Sharing	0.62%	1.93%	2.05%	N/A	N/A
<b>Contribution Rate Including Gain-Sharing</b>	6.27%	7.89%	7.69%	0.80%	5.22%

The SERS rate includes the UAAL rate for PERS Plan 1.

The LEOFF contribution rate is the State's portion for Plan 2 (20% of the Normal Cost) plus the UAAL rate for Plan 1.

### Change in Employer and State Normal Cost by Source

	PERS	TRS	SERS	LEOFF	WSP
<b>Change in Normal Costs</b>					
2003 Normal Cost	3.63%	3.94%	5.46%	2.88%	4.51%
Minus the Rate for Future Gain-Sharing	(0.25%)	(1.21%)	(1.95%)	N/A	N/A
<b>2003 Adjusted Normal Cost</b>	3.38%	2.73%	3.51%	2.88%	4.51%
Assets	0.26%	0.38%	0.31%	0.18%	2.06%
Salaries	(0.22%)	(0.31%)	(0.30%)	(0.10%)	(1.31%)
Growth	0.16%	0.36%	0.21%	0.06%	0.37%
Economic Gains/Losses	0.20%	0.43%	0.22%	0.14%	1.12%
Termination/Return to Work	(0.02%)	(0.14%)	(0.11%)	(0.02%)	(0.16%)
Retirement	0.04%	0.03%	0.02%	0.01%	(0.04%)
Demographic Gains/Losses	0.02%	(0.11%)	(0.09%)	(0.01%)	(0.20%)
Other Gains/Losses	(0.18%)	(0.15%)	(0.23%)	(0.07%)	(0.21%)
Total Change	0.04%	0.17%	(0.10%)	0.06%	0.71%
<b>2004 Preliminary Normal Cost</b>	3.42%	2.90%	3.41%	2.94%	5.22%
Laws of 2005 Applied to 2004	0.00%	0.00%	0.00%	0.09%	0.00%
<b>2004 Adjusted Normal Cost</b>	3.42%	2.90%	3.41%	3.03%	5.22%
Additional Rate for Future Gain-Sharing	0.20%	1.07%	1.63%	N/A	N/A
<b>Normal Cost Rate Including Gain-Sharing</b>	3.62%	3.97%	5.04%	3.03%	5.22%

The LEOFF contribution rate is the State's portion only (20% of the Plan 2 Normal Cost).

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### Change in Employer and State UAAL Rate by Source

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	PERS	TRS	SERS	LEOFF	WSP
Change in UAAL Rate					
2003 UAAL Rate	2.10%	2.80%	2.10%	(2.85%)	N/A
Minus the Rate for Future Gain-Sharing	(0.40%)	(0.80%)	(0.40%)	N/A	N/A
2003 Adjusted UAAL Rate	1.70%	2.00%	1.70%	(2.85%)	N/A
Assets	0.24%	0.73%	N/A	1.54%	N/A
Salaries	(0.08%)	(0.19%)	N/A	(0.09%)	N/A
Growth	0.04%	0.06%	N/A	(0.04%)	N/A
Inflation (CPI)	0.00%	0.00%	N/A	(0.50%)	N/A
Economic Gains/Losses	0.20%	0.60%	N/A	0.91%	N/A
Termination/Return to Work	0.02%	0.01%	N/A	0.02%	N/A
Retirement	0.01%	(0.02%)	N/A	0.01%	N/A
Demographic Gains/Losses	0.03%	(0.01%)	N/A	0.03%	N/A
Other Gains/Losses	0.30%	0.47%	0.53%	(0.37%)	N/A
Total Change	0.53%	1.06%	0.53%	0.57%	N/A
2004 Preliminary UAAL Rate	2.23%	3.06%	N/A	(2.28%)	N/A
Laws of 2005 Applied to 2004	0.00%	0.00%	N/A	0.05%	N/A
2004 UAAL Rate	2.23%	3.06%	2.23%	(2.23%)	N/A
Additional Rate for Future Gain-Sharing	0.42%	0.86%	0.42%	N/A	N/A
<b>Normal Cost Rate Including Gain-Sharing</b>	<b>2.65%</b>	<b>3.92%</b>	<b>2.65%</b>	<b>(2.23%)</b>	<b>N/A</b>

The SERS rate is to fund the PERS Plan 1 UAAL.

The LEOFF contribution rate is the UAAL rate for plan 1. The plan has a surplus of assets over liabilities, so no rate is currently payable.

## Effect of Plan, Assumption, and Method Changes

In addition to experience gains or losses, significant changes in plan provisions or actuarial assumptions and methods will also have an impact on contribution rates.

### Plan Changes:

- PERS 1 Veterans (Chapter 255, Laws 2005)
- PERS 2/3 EMTs into LEOFF 2 (Chapter 459, Laws 2005)
- TRS 1 Part-time ESAs (Chapter 23, Laws 2005)
- LEOFF 1 Ex-spouse survivor benefit (Chapter 62, Laws 2005)
- LEOFF 2 Disability (Chapter 451, Laws 2005)

### Assumption Changes:

- LEOFF 2 Disability (Chapter 451, Laws 2005)

### Method Changes:

- The cost of future gain-sharing benefits was reflected in the 2003 valuation, but is not reflected in the 2004 valuation (statutory funding policy change).
- The suspension of payments on the Plan 1 UAAL in PERS and TRS during the 2005-07 biennium is reflected in the valuation (statutory funding policy change).
- The Plan 2/3 normal cost rates were determined without adjustment for the lag in time between the valuation date and the date the rates become effective. (The 2003 valuation had an adjustment.)

The table below shows the effect of the above changes on the current actuarial valuation results.

Effect of Plan, Assumption and Method Changes								
	PERS 1	PERS 2/3	TRS 1	TRS 2/3	SERS 2/3	LEOFF 1	LEOFF 2	WSP
<b>Before Changes</b>								
Present Value Fully Projected Benefits	\$13,312	\$15,414	\$10,773	\$5,632	\$2,296	\$4,321	\$4,737	\$739
Present Value Credited Projected Benefits	12,636	8,562	10,306	2,867	1,270	4,272	2,492	560
Actuarial Value of Assets	9,928	11,431	8,728	4,138	1,630	4,666	2,947	660
Unfunded Liability	2,708	(2,869)	1,578	(1,271)	(360)	(394)	(455)	(100)
Employer Contribution Rate	6.41%	6.41%	7.97%	7.97%	8.54%	0.00%	4.53%	5.72%
<b>After Changes</b>								
Present Value Fully Projected Benefits	\$12,818	\$15,280	\$10,360	\$5,256	\$2,126	\$4,330	\$4,800	\$739
Present Value Credited Projected Benefits	12,182	8,504	9,920	2,711	1,191	4,281	2,521	560
Actuarial Value of Assets	9,928	11,431	8,728	4,138	1,630	4,666	2,947	660
Unfunded Liability	2,254	(2,927)	1,192	(1,427)	(439)	(385)	(426)	(100)
Employer Contribution Rate	5.65%	5.65%	5.96%	5.96%	5.64%	0.00%	4.57%	5.22%
<b>Increase/(Decrease) in Rate</b>	(0.76%)	(0.76%)	(2.01%)	(2.01%)	(2.90%)	0.00%	0.04%	(0.50%)

*Before and after changes include actuarial gains and losses for the year ending 9/30/2004.*

*The LEOFF contribution rate is the Employer's portion only (30% of the Plan 2 Normal Cost).*

# Participant Data

$L = 4 = \log_{10} 28' - 22.9290 - 289.253'' \cdot 5 + 0.0684649 + 2$

For the golden core  $N = 17$ . We have  $N = 17$ .

Given distance ( $\eta$ ) =  $r'$ ; cos.  $\frac{1}{2}v'$ , or

Log. cos.  $\frac{1}{2}v'$  we have  $\log r' = \log \frac{N-1}{\frac{N+1}{2} - 1}$

Log.  $\frac{N-1}{N+1} = \frac{N-1}{2N+2} = \frac{16}{34} = 18^9 \cdot 6960002$

Log.  $\frac{1}{2} = 0.4966525$

$E = \frac{18^9 \cdot 6960002}{0.4966525} = 2, c D = 1,$

the application of the rule of the golden number we have  $r' = v' - u'$

$P = \frac{1}{2} \cdot 12' 48'' \cdot 1 + 98^\circ 54' 37.5$

# PARTICIPANT DATA

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## Overview of System Membership

The state administers eight retirement systems for state and local public employees. Retirement system membership is determined according to the participant's occupation and employer. Coverage of employees by each system is defined in separate chapters of the Revised Code of Washington (RCW).

The state also administers benefits for volunteer fire fighters and two small judicial systems (not included in this valuation). The judicial systems are closed to new members. Judges hired after June 30, 1988 are members of PERS 2/3.

The five largest retirement systems and a general description of their membership are listed below.

<b>PERS - Public Employees' Retirement System</b> <i>Chapter 41.40 RCW</i>	State employees; employees of all counties and most cities (the exceptions are Tacoma, Seattle, and Spokane); non-teaching employees of institutions of higher learning and community colleges; employees of ports, service districts, Energy Northwest (formerly known as the Washington Public Power Supply System) and public utility districts. Judges first elected or appointed after June 30, 1988 are also included.
<b>TRS - Teachers' Retirement System</b> <i>Chapter 41.32 RCW</i>	Certificated teachers; administrators; and educational staff associates.
<b>SERS - School Employees' Retirement System</b> <i>Chapter 41.35 RCW</i>	Classified school district employees.
<b>LEOFF - Law Enforcement Officers' and Fire Fighters' Retirement System</b> <i>Chapter 41.26 RCW</i>	Fire fighters; Emergency Medical Technicians; law enforcement officers including sheriffs; university, port, city police officers, and enforcement officers with the Department of Fish and Wildlife.
<b>WSP - Washington State Patrol Retirement System</b> <i>Chapter 43.43 RCW</i>	Commissioned officers of the Washington State Patrol.

**Active Membership By Employer and Plan**

Employer	Employer	Total by			TRS		
		PERS			TRS		
		Plan 1	Plan 2	Plan 3	Plan 1	Plan 2	Plan 3
State Agencies	60,171	6,648	44,098	8,121	89	4	59
Higher Education	20,078	1,691	14,588	3,628	52	7	9
Community Colleges	6,038	500	4,313	951	189	39	46
K-12	117,458	3,348	0	0	9,486	7,366	48,996
Counties	29,205	2,208	21,626	2,592	0	0	0
County Sub Divisions	17,010	1,251	13,981	1,745	0	0	0
First Class Cities	8,336	323	2,556	442	0	0	0
Other Cities	16,995	892	9,863	1,316	0	0	0
Ports	2,112	168	1,614	150	0	0	0
Education Service District	1,959	75	0	0	46	54	192
Fire Districts	3,021	29	469	50	0	0	0
Public Utility District	4,046	415	3,216	415	0	0	0
Water Districts	1,742	175	1,416	151	0	0	0
Energy Northwest	1,196	70	832	294	0	0	0
Unions	36	36	0	0	0	0	0
<b>TOTAL</b>	<b>289,403</b>	<b>17,829</b>	<b>118,572</b>	<b>19,855</b>	<b>9,862</b>	<b>7,470</b>	<b>49,302</b>

**Active Membership By Employer and Plan**

(Continued)

Employer	SERS		LEOFF		WSP	
	Plan 2	Plan 3	Plan 1	Plan 2	Plan 1	Plan 2
State Agencies	0	0	0	95	997	60
Higher Education	0	0	0	103	0	0
Community Colleges	0	0	0	0	0	0
K-12	19,791	28,471	0	0	0	0
Counties	0	0	119	2,660	0	0
County Sub Divisions	0	0	3	30	0	0
First Class Cities	0	0	411	4,604	0	0
Other Cities	0	0	233	4,691	0	0
Ports	0	0	6	174	0	0
Education Service District	633	959	0	0	0	0
Fire Districts	0	0	76	2,397	0	0
Public Utility District	0	0	0	0	0	0
Water Districts	0	0	0	0	0	0
Energy Northwest	0	0	0	0	0	0
Unions	0	0	0	0	0	0
<b>TOTAL</b>	<b>20,424</b>	<b>29,430</b>	<b>848</b>	<b>14,754</b>	<b>997</b>	<b>60</b>

The tables below summarize participant data changes from last year's valuation to the current year's valuation. The participant data is divided into two main categories: (1) Actives and (2) Annuitants (receiving a pension or annuity payment). The "+" symbol indicates new participants entering the system or actives and new beneficiaries entering the annuitant status; whereas the "-" symbol indicates participants that have left either active or annuitant status.

Reconciliation of Participant Data						
	PERS			TRS		
	Plan 1	Plan 2	Plan 3	Plan 1	Plan 2	Plan 3
2003 Actives	19,740	117,262	17,548	11,175	7,637	47,263
Transfers	0	(434)	4,241	0	(47)	49
Hires/Rehires (+)	445	10,582	234	161	274	4,704
New Retirees (-)	(1,732)	(732)	(104)	(1,281)	(94)	(97)
Deaths (-)	(50)	(172)	(16)	(20)	(4)	(20)
Terminations (-)	(574)	(7,934)	(2,048)	(173)	(296)	(2,597)
2004 Actives	17,829	118,572	19,855	9,862	7,470	49,302
2003 Annuitants	54,372	10,904	86	33,855	957	385
New Retirees (+)	2,149	1,333	130	1,544	175	148
Annuitant Deaths (-)	(2,278)	(246)	(4)	(921)	(9)	(2)
New Survivors (+)	359	127	10	180	8	12
Other (-)	(34)	(12)	0	(34)	(4)	(2)
2004 Annuitants	54,568	12,106	222	34,624	1,127	541
Ratio Actives to Annuitants	0.33	9.79	89.44	0.28	6.63	91.13

Reconciliation of Participant Data						
(Continued)						
	SERS		LEOFF		WSP	
	Plan 2	Plan 3	Plan 1	Plan 2	Plan 1	Plan 2
2003 Actives	21,504	27,710	991	14,560	1,045	34
Transfers	401	80	0	0	0	0
Hires/Rehires (+)	387	4,432	5	690	3	27
New Retirees (-)	(274)	(128)	(139)	(80)	(27)	0
Deaths (-)	(36)	(13)	(4)	(10)	(1)	0
Terminations (-)	(1,558)	(2,651)	(5)	(406)	(23)	(1)
2004 Actives	20,424	29,430	848	14,754	997	60
2003 Annuitants	736	306	8,054	316	735	0
New Retirees (+)	354	173	150	117	30	0
Annuitant Deaths (-)	(9)	(1)	(194)	(2)	(13)	0
New Survivors (+)	16	4	102	3	10	0
Other (-)	0	(1)	(2)	(2)	0	0
2004 Annuitants	1,097	481	8,110	432	762	0
Ratio Actives to Annuitants	18.62	61.19	0.10	34.15	1.31	0.00

## Summary of Plan Participants

<b>Summary of Plan Participants</b>								
PERS:	2004				2003			
	Plan 1	Plan 2	Plan 3	Total	Plan 1	Plan 2	Plan 3	Total
<b>Active Members</b>								
Number	17,829	118,572	19,855	156,256	19,740	117,262	17,548	154,550
Total Salaries (millions)	\$863	\$5,340	\$880	\$7,083	\$945	\$5,143	\$787	\$6,875
Average Age	55.9	45.1	41.8	45.9	55.2	44.6	42.2	45.7
Average Service	21.7	9.4	7.9	10.6	21.4	9.0	8.5	10.5
Average Salary	\$48,383	\$45,038	\$44,335	\$45,330	\$47,876	\$43,855	\$44,823	\$44,478
<b>Terminated Members</b>								
Number Vested	2,993	16,754	1,284	21,031	3,142	16,089	770	20,001
Number Non-Vested	5,847	78,411	0	84,258	6,525	78,853	0	85,378
<b>Retirees (including L&amp;I disabled)</b>								
Number of Retirees (All)	54,568	12,106	222	66,896	54,372	10,904	86	65,362
Average Monthly Benefit, All Retirees	\$1,325	\$657	\$401	\$1,201	\$1,250	\$618	\$407	\$1,144
Number of New Service Retirees	2,059	1,191	114	3,364	2,148	1,126	70	3,344
Average Monthly Benefit, New Service Retirees	\$2,262	\$910	\$418	\$1,721	\$2,255	\$828	\$429	\$1,736

<b>Summary of Plan Participants</b>								
TRS:	2004				2003			
	Plan 1	Plan 2	Plan 3	Total	Plan 1	Plan 2	Plan 3	Total
<b>Active Members</b>								
Number	9,862	7,470	49,302	66,634	11,175	7,637	47,263	66,075
Total Salaries (millions)	\$616	\$415	\$2,463	\$3,494	\$692	\$415	\$2,308	\$3,415
Average Age	56.1	50.1	41.5	44.6	55.4	49.3	41.1	44.5
Average Service	24.3	12.8	8.7	11.5	23.9	12.1	8.4	11.4
Average Salary	\$62,470	\$55,540	\$49,958	\$52,436	\$61,954	\$54,333	\$48,836	\$51,690
<b>Terminated Members</b>								
Number Vested	1,475	2,510	2,761	6,746	1,647	2,493	2,418	6,558
Number Non-Vested	720	3,931	0	4,651	776	4,169	0	4,945
Temporarily Disabled	0	0	0	0	2	0	0	2
<b>Retirees</b>								
Number of Retirees (All)	34,624	1,127	541	36,292	33,855	957	385	35,197
Average Monthly Benefit, All Retirees	\$1,603	\$991	\$436	\$1,567	\$1,539	\$941	\$407	\$1,510
Number of New Service Retirees	1,517	161	138	1,816	1,459	136	94	1,689
Average Monthly Benefit, New Service Retirees	\$2,315	\$1,198	\$535	\$2,081	\$2,206	\$1,036	\$482	\$2,016

**Summary of Plan Participants***Continued*

SERS:	2004			2003		
	Plan 2	Plan 3	Total	Plan 2	Plan 3	Total
<b>Active Members</b>						
Number	20,424	29,430	49,854	21,504	27,710	49,214
Total Salaries (millions)	\$482	\$686	\$1,168	\$494	\$639	\$1,133
Average Age	49.1	46.2	47.4	48.3	45.8	46.9
Average Service	9.4	7.2	8.1	8.6	7.1	7.8
Average Salary	\$23,604	\$23,315	\$23,433	\$22,967	\$23,051	\$23,014
<b>Terminated Members</b>						
Number Vested	2,428	2,035	4,463	1,902	1,648	3,550
Number Non-Vested	4,588	0	4,588	4,232	0	4,232
<b>Retirees</b>						
Number of Retirees (All)	1,097	481	1,578	736	306	1,042
Average Monthly Benefit, All Retirees	\$534	\$248	\$447	\$518	\$231	\$434
Number of New Service Retirees	323	165	488	273	115	388
Average Monthly Benefit, New Service Retirees	\$581	\$273	\$477	\$562	\$259	\$472

**Summary of Plan Participants***Continued*

LEOFF:	2004			2003		
	Plan 1	Plan 2	Total	Plan 1	Plan 2	Total
<b>Active Members</b>						
Number	848	14,754	15,602	991	14,560	15,551
Total Salaries (millions)	\$64	\$1,020	\$1,083	\$71	\$967	\$1,038
Average Age	54.8	40.1	40.9	54.0	39.5	40.4
Average Service	30.2	11.3	12.3	29.3	10.7	11.9
Average Salary	\$75,222	\$69,098	\$69,431	\$71,924	\$66,388	\$66,741
<b>Terminated Members</b>						
Number Vested	7	521	528	14	439	453
Number Non-Vested	70	1,233	1,303	84	1,186	1,270
<b>Retirees</b>						
Number of Retirees (All)	8,110	432	8,542	8,054	316	8,370
Average Monthly Benefit, All Retirees	\$2,846	\$1,485	\$2,778	\$2,796	\$1,341	\$2,741
Number of New Service Retirees*	148	104	252	163	66	229
Average Monthly Benefit, New Service Retirees*	\$3,749	\$1,848	\$2,965	\$3,642	\$1,720	\$3,088

\*Includes disabled retirees for Plan 1 only.

**Summary of Plan Participants***Continued*

WSP:	2004			2003		
	Plan 1	Plan 2	Total	Plan 1	Plan 2	Total
<b>Active Members</b>						
Number	997	60	1,057	1,045	34	1,079
Total Salaries (millions)	\$62	\$3	\$65	\$65	\$1	\$66
Average Age	39.4	29.1	38.8	38.8	28.8	38.5
Average Service	12.8	2.0	12.2	12.2	0.8	11.8
Average Salary	\$62,042	\$44,206	\$61,030	\$61,848	\$41,018	\$61,192
<b>Terminated Members</b>						
Number Vested	39	0	39	32	0	32
Number Non-Vested	20	1	21	20	0	20
Disabled Members*	61	0	61	61	0	61
<b>Retirees</b>						
Number of Retirees (All)	762	0	762	735	0	735
Average Monthly Benefit, All Retirees	\$2,980	\$0	\$2,980	\$2,884	\$0	\$2,884
Number of New Service Retirees	30	0	30	25	0	25
Average Monthly Benefit, New Service Retirees	\$3,473	\$0	\$3,473	\$3,811	\$0	\$3,811

*\*Benefits provided outside of pension funds*

# Appendices

$$L = 4 = \log_{10} 28' - 22.9290 - 29.2539 + 0.0684649 + 2$$

For the golden core  $N = 17$  we have  $N = 17$ .

Then distance ( $\eta$ ) =  $r'$ ;  $\cos \frac{1}{2}v'$ , or

the ~~log~~ ~~gates~~. We have  $\eta = \sqrt{N^2 - 5654}$ ,

Log.  $\cos \frac{1}{2}v'$  have  $\sqrt{N^2 - 3680(N-1)}$ ,

keewise Log.  $\frac{r'}{r} = \frac{16 - 1}{0.07086945} = 18$ ,

Log.  $\eta = \frac{18^9 - 6960002}{0.4966525} = 2$ ,

we have  $E = \frac{27}{2} - 2$ ,  $c_{CD} = 1$ ,

the application of the principle of the

error of the angle  $v' - u'$  for  $P = \frac{1}{2} \cdot 54^\circ 37' 54''$

error of the angle  $v' - u'$  for  $P = \frac{1}{2} \cdot 54^\circ 37' 54''$

error of the angle  $v' - u'$  for  $P = \frac{1}{2} \cdot 54^\circ 37' 54''$

# APPENDICES

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## Actuarial Assumptions and Methods

### Actuarial Cost Methods

The method employed varies by plan:

**Plans 1:** A variation of the Aggregate Cost Method was used to determine the normal cost and the actuarial accrued liability for retirement, termination and ancillary benefits. Under this method, the unfunded actuarial accrued liability is equal to the unfunded actuarial present value of projected benefits less the actuarial present value of future normal costs for all active members. The present value of future normal costs is based on the Aggregate normal cost rate for Plan 2/3 and the resulting unfunded actuarial accrued liability is amortized by June 30, 2024 as a level percentage of projected system payroll. The projected payroll includes pay from plan 2 and plan 3 as well as projected payroll from future new entrants.

As a result of this hybrid method, employers for each system are charged the same contribution rate regardless of the plan in which employees hold membership (except for LEOFF).

**Plans 2 and Plans 3:** The Aggregate Cost Method was used to determine the normal cost and the actuarial accrued liability for retirement, termination and ancillary benefits. Under this method, the unfunded actuarial present value of fully projected benefits is amortized over the future payroll of the active group. The entire contribution is considered normal cost and no unfunded actuarial accrued liability exists.

**Washington State Patrol:** The Aggregate Cost Method was used to determine the normal cost and the actuarial accrued liability for retirement, termination and ancillary benefits. The entire normal cost is divided equally between the employee and the employer. The minimum employee normal cost rate is 2%.

The Projected Unit Credit (PUC) cost method was used to calculate the plan's funded status and is consistent with governmental accounting standards. Please see the Glossary for an explanation of the PUC cost method.

### Asset Valuation Method

The actuarial value of assets is calculated under an adjusted market value method by starting with the market value of assets. For subsequent years the actuarial value of assets is determined by adjusting the market value of assets to reflect the difference between the actual investment return and the expected investment return during each of the last 8 years or, if fewer, the completed years since adoption, at the following rates per year (annual recognition):

<b>Annual Gain/Loss</b>		
<b>Rate of Return</b>	<b>Smoothing Period</b>	<b>Annual Recognition</b>
15% and up	8 years	12.50%
14-15%	7 years	14.29%
13-14%	6 years	16.67%
12-13%	5 years	20.00%
11-12%	4 years	25.00%
10-11%	3 years	33.33%
9-10%	2 years	50.00%
7-9%	1 year	100.00%
6-7%	2 years	50.00%
5-6%	3 years	33.33%
4-5%	4 years	25.00%
3-4%	5 years	20.00%
2-3%	6 years	16.67%
1-2%	7 years	14.29%
1% and lower	8 years	12.50%

Additionally, the actuarial value of assets may not exceed 130% nor drop below 70% of the market value of assets.

### **Gain-Sharing Valuation Method**

The difference between the present value of future benefits valued at a gross and net valuation interest rate was used to determine the liability associated with future gain-sharing benefits. See the table of Economic Assumptions in this Appendix for a listing of the valuation interest rates used for each individual retirement system and plan. The gross valuation interest rate, the rate before reduction for gain-sharing, was used to determine the present value of future salaries.

### **Changes in Assumptions and Methods since Last Valuation**

Pension funding legislation was adopted during the 2005 legislative session (Chapter 370, Laws of 2005), which creates a short-term change in funding policy. The policy is to adopt annual contribution rates over a four-year “phase-in” period from 2005-09, to suspend payments on the Plan 1 UAAL in PERS and TRS during the 2005-07 biennium, and to delay recognition of the cost of future gain-sharing benefits until the 2007-09 biennium.

Future gain-sharing benefits represent a material liability that has been excluded from the results of this valuation. This was done as prescribed by legislation in 2005. The cost of future gain-sharing benefits, though excluded from the final results, is provided in the Actuarial Gains and Losses and the Effects of Plan, Assumption and Method Changes sections of this report.

The Plan 2/3 normal cost rates were determined without adjustment for the lag in time between the valuation date and the date the rates become effective.

## Economic Assumptions

Economic Assumptions					
By System	PERS	TRS	SERS	LEOFF	WSP
Annual Growth in Membership	1.25%	0.90%	1.25%	1.25%	1.25%
Interest on Member Contributions <sup>1</sup>	5.50%	5.50%	5.50%	5.50%	5.50%
Return on Investment Earnings <sup>2</sup>	8.00%	8.00%	8.00%	8.00%	8.00%
Reduction (due to future gain-sharing payments) <sup>3</sup>	0.40%	0.40%	0.40%	N/A	N/A
Net Return on Investment Earnings	7.60%	7.60%	7.60%	8.00%	8.00%
Inflation <sup>4</sup>	3.50%	3.50%	3.50%	3.50%	3.50%
General Salary Increases (due to inflation) <sup>5</sup>	4.50%	4.50%	4.50%	4.50%	4.50%
Annual COLA	Uniform	Uniform			
Plan 1:	COLA <sup>6</sup>	COLA <sup>6</sup>	N/A	3.50% <sup>8</sup>	3.00% <sup>7</sup>
Plan 2/3:	3.00% <sup>7</sup>				

<sup>1</sup>Annual rate, compounded quarterly

<sup>2</sup>Annual rate, compounded annually

<sup>3</sup>Gain-sharing applies only in PERS, TRS and SERS. Rate reductions shown are for plan 1 only.

*Plan 2/3 reductions: PERS = 0.04%, TRS = 0.30%, SERS = 0.38%. These rate reductions are smaller than the plan 1 reductions because the plan 2/3 defined benefits are combined, but only plan 3 members receive gain-sharing benefits.*

<sup>4</sup>Based on the CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bremerton, WA - All Items

<sup>5</sup>Excludes longevity, merit or step increases that usually apply to members in the early part of their careers

<sup>6</sup>As provided in the plan provisions

<sup>7</sup>Based on the CPI (3% maximum per year).

<sup>8</sup>Equal to the CPI

## Demographic Assumptions

<b>Probability of Service Retirement</b>												SERS		LEOFF		WSP					
PERS		TRS				Plan 2/3*				Plan 2/3*				Plan 2/3*		Plan 2/3*		Plan 1			
Age	Male	Female	Service less than 30 years		Service greater than or equal to 30 years		Service not equal to 30 years		Service less than 30 years		Service greater than or equal to 30 years		Service less than 30 years		Service greater than or equal to 30 years		Male & Female		Male & Female		
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.31
46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.31
47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.31
48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.31
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.20	0.40	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.31
50	0.64	0.40	0.00	0.00	0.00	0.00	0.00	0.25	0.20	0.40	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.10	0.31	0.31
51	0.57	0.43	0.00	0.00	0.00	0.00	0.25	0.20	0.40	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.10	0.23	0.23
52	0.52	0.37	0.00	0.00	0.00	0.00	0.25	0.20	0.40	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.10	0.23	0.23
53	0.52	0.33	0.00	0.00	0.00	0.00	0.25	0.20	0.40	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.16	0.23	0.23
54	0.52	0.32	0.00	0.00	0.00	0.00	0.25	0.20	0.40	0.30	0.03	0.08	0.05	0.02	0.02	0.04	0.04	0.10	0.19	0.23	0.23
55	0.22	0.26	0.05	0.05	0.07	0.07	0.20	0.20	0.35	0.30	0.05	0.05	0.08	0.08	0.05	0.05	0.07	0.07	0.16	0.24	0.23
56	0.22	0.18	0.05	0.05	0.07	0.07	0.20	0.20	0.35	0.30	0.05	0.10	0.08	0.15	0.05	0.05	0.07	0.07	0.16	0.25	0.28
57	0.22	0.18	0.05	0.05	0.07	0.07	0.20	0.20	0.40	0.30	0.05	0.10	0.08	0.15	0.05	0.05	0.07	0.07	0.16	0.25	0.28
58	0.22	0.22	0.10	0.05	0.14	0.07	0.20	0.25	0.45	0.30	0.05	0.10	0.08	0.15	0.10	0.05	0.14	0.07	0.23	0.33	0.28
59	0.22	0.37	0.10	0.05	0.14	0.07	0.20	0.25	0.45	0.30	0.20	0.15	0.30	0.23	0.10	0.05	0.14	0.07	0.23	0.33	0.28
60	0.22	0.18	0.14	0.14	0.21	0.21	0.20	0.20	0.60	0.35	0.40	0.20	0.20	0.60	0.30	0.14	0.14	0.21	0.23	0.33	1.00
61	0.22	0.22	0.14	0.18	0.21	0.27	0.45	0.35	0.60	0.55	0.30	0.30	0.45	0.45	0.14	0.18	0.21	0.27	0.37	1.00	1.00
62	0.40	0.37	0.33	0.30	0.50	0.45	0.30	0.25	0.60	0.50	0.30	0.30	0.45	0.45	0.33	0.30	0.50	0.45	0.28	0.37	1.00
63	0.26	0.26	0.26	0.26	0.39	0.39	0.25	0.20	0.60	0.50	0.60	0.50	0.90	0.75	0.26	0.26	0.39	0.39	0.28	0.37	1.00
64	0.30	0.26	0.79	0.82	0.90	0.90	0.45	0.45	0.90	0.90	0.50	0.50	0.50	0.50	0.79	0.82	0.90	0.90	0.40	0.48	1.00
65	0.49	0.46	0.52	0.49	0.52	0.49	0.45	0.35	0.90	0.90	0.50	0.30	0.50	0.30	0.52	0.49	0.52	0.49	1.00	1.00	1.00
66	0.30	0.26	0.30	0.30	0.35	0.30	0.30	0.35	0.90	0.90	0.50	0.25	0.50	0.25	0.30	0.30	0.30	0.30	1.00	1.00	1.00
67	0.30	0.26	0.22	0.26	0.22	0.26	0.30	0.35	0.90	0.90	0.50	0.25	0.50	0.25	0.22	0.26	0.22	0.26	1.00	1.00	1.00
68	0.30	0.26	0.22	0.26	0.22	0.26	0.30	0.25	0.90	0.90	0.50	0.40	0.50	0.40	0.22	0.26	0.22	0.26	1.00	1.00	1.00
69	0.30	0.26	0.26	0.22	0.26	0.22	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
70+	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

\*Approximately 50% of those eligible to retire with at least 20, but less than 30 years of service in Plan 3 elect to defer their benefits.

RP-2000 Mortality Rates				Mortality											
Combined Healthy Table		Age Offset (Years) -->		PERS - All Plans		TRS - All Plans		SERS - All Plans		LEOFF - All Plans		WSP - All Plans			
Age	Male	Female	Age	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
20	0.000345	0.000191	20	0.000345	0.000191	0.000345	0.000191	0.000345	0.000191	0.000345	0.000191	0.000345	0.000191	0.000345	0.000191
21	0.000357	0.000192	21	0.000357	0.000192	0.000345	0.000191	0.000357	0.000191	0.000357	0.000192	0.000357	0.000192	0.000357	0.000192
22	0.000366	0.000194	22	0.000366	0.000194	0.000345	0.000191	0.000366	0.000191	0.000366	0.000194	0.000366	0.000194	0.000366	0.000194
23	0.000373	0.000197	23	0.000373	0.000197	0.000357	0.000192	0.000373	0.000192	0.000373	0.000197	0.000373	0.000197	0.000373	0.000197
24	0.000376	0.000201	24	0.000376	0.000201	0.000366	0.000194	0.000376	0.000194	0.000376	0.000197	0.000376	0.000201	0.000376	0.000201
25	0.000376	0.000207	25	0.000376	0.000207	0.000373	0.000197	0.000376	0.000197	0.000376	0.000197	0.000376	0.000207	0.000376	0.000207
26	0.000378	0.000214	26	0.000378	0.000214	0.000376	0.000201	0.000378	0.000201	0.000378	0.000201	0.000378	0.000214	0.000378	0.000214
27	0.000382	0.000223	27	0.000382	0.000223	0.000376	0.000207	0.000382	0.000207	0.000382	0.000207	0.000382	0.000223	0.000382	0.000223
28	0.000393	0.000235	28	0.000393	0.000235	0.000378	0.000214	0.000393	0.000214	0.000393	0.000214	0.000393	0.000235	0.000393	0.000235
29	0.000412	0.000248	29	0.000412	0.000248	0.000382	0.000223	0.000412	0.000223	0.000412	0.000223	0.000412	0.000248	0.000412	0.000248
30	0.000444	0.000264	30	0.000444	0.000264	0.000393	0.000235	0.000444	0.000235	0.000444	0.000235	0.000444	0.000264	0.000444	0.000264
31	0.000499	0.000307	31	0.000499	0.000307	0.000412	0.000248	0.000499	0.000248	0.000499	0.000248	0.000499	0.000307	0.000499	0.000307
32	0.000562	0.000350	32	0.000562	0.000350	0.000444	0.000264	0.000562	0.000264	0.000562	0.000264	0.000562	0.000350	0.000562	0.000350
33	0.000631	0.000394	33	0.000631	0.000394	0.000499	0.000307	0.000631	0.000307	0.000631	0.000307	0.000631	0.000394	0.000631	0.000394
34	0.000702	0.000435	34	0.000702	0.000435	0.000562	0.000350	0.000702	0.000350	0.000702	0.000350	0.000702	0.000435	0.000702	0.000435
35	0.000773	0.000475	35	0.000773	0.000475	0.000631	0.000394	0.000773	0.000394	0.000773	0.000394	0.000773	0.000475	0.000773	0.000475
36	0.000841	0.000514	36	0.000841	0.000514	0.000702	0.000435	0.000841	0.000435	0.000841	0.000435	0.000841	0.000514	0.000841	0.000514
37	0.000904	0.000554	37	0.000904	0.000554	0.000773	0.000475	0.000904	0.000475	0.000904	0.000475	0.000904	0.000554	0.000904	0.000554
38	0.000964	0.000598	38	0.000964	0.000598	0.000841	0.000514	0.000964	0.000514	0.000964	0.000514	0.000964	0.000598	0.000964	0.000598
39	0.001021	0.000648	39	0.001021	0.000648	0.000904	0.000554	0.001021	0.000554	0.001021	0.000554	0.001021	0.000648	0.001021	0.000648
40	0.001079	0.000706	40	0.001079	0.000706	0.000964	0.000598	0.001079	0.000598	0.001079	0.000598	0.001079	0.000706	0.001079	0.000706
41	0.001142	0.000774	41	0.001142	0.000774	0.001021	0.000648	0.001142	0.000648	0.001142	0.000648	0.001142	0.000774	0.001142	0.000774
42	0.001215	0.000852	42	0.001215	0.000852	0.000937	0.000706	0.001215	0.000706	0.001215	0.000706	0.001215	0.000852	0.001215	0.000852
43	0.001299	0.000937	43	0.001299	0.000937	0.001142	0.000774	0.001299	0.000774	0.001299	0.000774	0.001299	0.000937	0.001299	0.000937
44	0.001397	0.001029	44	0.001397	0.001029	0.001215	0.000852	0.001397	0.000852	0.001397	0.000852	0.001397	0.001029	0.001397	0.001029

**Mortality**

(Continued)

RP-2000 Mortality Rates		Combined Healthy		Age Offset		PERS - All Plans		TRS - All Plans		SERS - All Plans		LEOFF - All Plans		WSP - All Plans			
Age	Male	Female	Age	Male	Female	Age	Male	Female	Age	Male	Female	Age	Male	Female	Age	Male	Female
45	0.001508	0.001124	45	0.001508	0.001124	0.001299	0.000937	0.001508	0.000937	0.001508	0.001124	0.001508	0.001124	0.001508	0.001124	0.001124	
46	0.001616	0.001223	46	0.001616	0.001223	0.001397	0.001029	0.001616	0.001029	0.001616	0.001223	0.001616	0.001223	0.001616	0.001223	0.001616	
47	0.001734	0.001326	47	0.001734	0.001326	0.001508	0.001124	0.001734	0.001124	0.001734	0.001326	0.001734	0.001326	0.001734	0.001326	0.001734	
48	0.001860	0.001434	48	0.001860	0.001434	0.001616	0.001223	0.001860	0.001223	0.001860	0.001434	0.001860	0.001434	0.001860	0.001434	0.001860	
49	0.001995	0.001550	49	0.001995	0.001550	0.001734	0.001326	0.001995	0.001326	0.001995	0.001550	0.001995	0.001550	0.001995	0.001550	0.001995	
50	0.002138	0.001676	50	0.002138	0.001676	0.001860	0.001434	0.002138	0.001434	0.002138	0.001676	0.002138	0.001676	0.002138	0.001676	0.002138	
51	0.002449	0.001852	51	0.002449	0.001852	0.001995	0.001550	0.002449	0.001550	0.002449	0.001852	0.002449	0.001852	0.002449	0.001852	0.002449	
52	0.002667	0.002018	52	0.002667	0.002018	0.002138	0.001676	0.002667	0.001676	0.002667	0.002018	0.002667	0.002018	0.002667	0.002018	0.002667	
53	0.002916	0.002207	53	0.002916	0.002207	0.002449	0.001852	0.002916	0.001852	0.002916	0.002207	0.002916	0.002207	0.002916	0.002207	0.002916	
54	0.003196	0.002424	54	0.003196	0.002424	0.002667	0.002018	0.003196	0.002018	0.003196	0.002424	0.003196	0.002424	0.003196	0.002424	0.003196	
55	0.003624	0.002717	55	0.003624	0.002717	0.002916	0.002207	0.003624	0.002207	0.003624	0.002717	0.003624	0.002717	0.003624	0.002717	0.003624	
56	0.004200	0.003090	56	0.004200	0.003090	0.003196	0.002424	0.004200	0.002424	0.004200	0.003090	0.004200	0.003090	0.004200	0.003090	0.004200	
57	0.004693	0.003478	57	0.004693	0.003478	0.003624	0.002717	0.004693	0.002717	0.004693	0.003478	0.004693	0.003478	0.004693	0.003478	0.004693	
58	0.005273	0.003923	58	0.005273	0.003923	0.003923	0.003090	0.005273	0.003090	0.005273	0.003923	0.005273	0.003923	0.005273	0.003923	0.005273	
59	0.005945	0.004441	59	0.005945	0.004441	0.004441	0.004693	0.005945	0.004693	0.005945	0.004441	0.005945	0.004441	0.005945	0.004441	0.005945	
60	0.006747	0.005055	60	0.006747	0.005055	0.005273	0.003923	0.006747	0.003923	0.006747	0.005055	0.006747	0.005055	0.006747	0.005055	0.006747	
61	0.007676	0.005814	61	0.007676	0.005814	0.005814	0.004441	0.007676	0.004441	0.007676	0.005814	0.007676	0.005814	0.007676	0.005814	0.007676	
62	0.008757	0.006657	62	0.008757	0.006657	0.006747	0.005055	0.008757	0.005055	0.008757	0.006657	0.008757	0.006657	0.008757	0.006657	0.008757	
63	0.010012	0.007648	63	0.010012	0.007648	0.007648	0.006767	0.005814	0.007648	0.005814	0.010012	0.007648	0.010012	0.007648	0.010012	0.007648	
64	0.011280	0.008619	64	0.011280	0.008619	0.008619	0.008757	0.006657	0.008619	0.006657	0.011280	0.008619	0.011280	0.008619	0.011280	0.008619	
65	0.012737	0.009706	65	0.012737	0.009706	0.010012	0.007648	0.012737	0.007648	0.012737	0.009706	0.012737	0.009706	0.012737	0.009706	0.012737	
66	0.014409	0.010954	66	0.014409	0.010954	0.010954	0.011280	0.008619	0.014409	0.008619	0.014409	0.010954	0.014409	0.010954	0.014409	0.010954	
67	0.016075	0.012163	67	0.016075	0.012163	0.012163	0.012737	0.009706	0.016075	0.009706	0.016075	0.012163	0.016075	0.012163	0.016075	0.012163	
68	0.017871	0.013445	68	0.017871	0.013445	0.014409	0.010954	0.017871	0.010954	0.017871	0.013445	0.017871	0.013445	0.017871	0.013445	0.017871	
69	0.019802	0.014860	69	0.019802	0.014860	0.016075	0.012163	0.019802	0.012163	0.019802	0.014860	0.019802	0.014860	0.019802	0.014860	0.019802	

Mortality											
(Continued)											
RP-2000 Mortality Rates				Age Offset (Years) -->				PERS - All Plans			
Age	Male	Female	Combined Healthy	Age	Male	Female	Age	Male	Female	Male	Female
70	0.022206	0.016742	70	0.022206	0.016742	0.017871	0.013445	0.022206	0.016742	0.022206	0.016742
71	0.024570	0.018579	71	0.024570	0.018579	0.019802	0.014860	0.024570	0.018579	0.024570	0.018579
72	0.027281	0.020665	72	0.027281	0.020665	0.022206	0.016742	0.027281	0.016742	0.020665	0.020665
73	0.030387	0.022970	73	0.030387	0.022970	0.024570	0.018579	0.030387	0.018579	0.022970	0.022970
74	0.033900	0.025458	74	0.033900	0.025458	0.027281	0.020665	0.033900	0.020665	0.033900	0.025458
75	0.037834	0.028106	75	0.037834	0.028106	0.030387	0.028106	0.022970	0.037834	0.028106	0.028106
76	0.042169	0.030966	76	0.042169	0.030966	0.033900	0.025458	0.042169	0.025458	0.042169	0.030966
77	0.046906	0.034105	77	0.046906	0.034105	0.037834	0.028106	0.046906	0.028106	0.046906	0.034105
78	0.052123	0.037595	78	0.052123	0.037595	0.042169	0.030966	0.052123	0.030966	0.052123	0.037595
79	0.057927	0.041506	79	0.057927	0.041506	0.046906	0.034105	0.057927	0.034105	0.057927	0.041506
80	0.064368	0.045879	80	0.064368	0.045879	0.052123	0.037595	0.064368	0.037595	0.064368	0.045879
81	0.072041	0.050780	81	0.072041	0.050780	0.057927	0.041506	0.072041	0.041506	0.072041	0.050780
82	0.080486	0.056294	82	0.080486	0.056294	0.064368	0.045879	0.080486	0.045879	0.080486	0.056294
83	0.089718	0.062506	83	0.089718	0.062506	0.072041	0.050780	0.089718	0.050780	0.089718	0.062506
84	0.099779	0.069517	84	0.099779	0.069517	0.080486	0.056294	0.099779	0.056294	0.099779	0.069517
85	0.110757	0.077446	85	0.110757	0.077446	0.089718	0.062506	0.110757	0.062506	0.110757	0.077446
86	0.122797	0.086376	86	0.122797	0.086376	0.099779	0.069517	0.122797	0.069517	0.122797	0.086376
87	0.136043	0.096337	87	0.136043	0.096337	0.110757	0.077446	0.136043	0.077446	0.136043	0.096337
88	0.150590	0.107303	88	0.150590	0.107303	0.122797	0.086376	0.150590	0.086376	0.150590	0.107303
89	0.166420	0.119154	89	0.166420	0.119154	0.136043	0.096337	0.166420	0.096337	0.166420	0.119154
90	0.183408	0.131682	90	0.183408	0.131682	0.150590	0.107303	0.183408	0.107303	0.183408	0.131682
91	0.199769	0.144604	91	0.199769	0.144604	0.166420	0.119154	0.199769	0.119154	0.199769	0.144604
92	0.216605	0.157618	92	0.216605	0.157618	0.183408	0.131682	0.216605	0.131682	0.216605	0.157618
93	0.233662	0.170433	93	0.233662	0.170433	0.199769	0.144604	0.233662	0.144604	0.233662	0.170433
94	0.250693	0.182799	94	0.250693	0.182799	0.216605	0.157618	0.250693	0.157618	0.250693	0.182799

**Mortality**

(Continued)

RP-2000 Mortality Rates				Age Offset (Years) -->				PERS - All Plans				TRS - All Plans				SERS - All Plans				LEOFF - All Plans				WSP - All Plans			
Combined Healthy		Male	Female	Age		Male	Female	Age		Male	Female	Age		Male	Female	Age		Male	Female	Age		Male	Female	Age		Male	Female
95	0.267491	0.194509	95	0.267491	0.194509	0.233662	0.170433	0.267491	0.170433	0.267491	0.194509	0.267491	0.194509	0.267491	0.194509	0.267491	0.194509	0.267491	0.194509	0.267491	0.194509	0.267491	0.194509	0.267491	0.194509		
96	0.283905	0.205379	96	0.283905	0.205379	0.250693	0.182799	0.283905	0.182799	0.283905	0.205379	0.283905	0.205379	0.283905	0.205379	0.283905	0.205379	0.283905	0.205379	0.283905	0.205379	0.283905	0.205379	0.283905	0.205379		
97	0.299852	0.215240	97	0.299852	0.215240	0.215240	0.267491	0.194509	0.299852	0.194509	0.299852	0.215240	0.299852	0.215240	0.299852	0.215240	0.299852	0.215240	0.299852	0.215240	0.299852	0.215240	0.299852	0.215240			
98	0.315296	0.223947	98	0.315296	0.223947	0.223947	0.283905	0.205379	0.315296	0.205379	0.315296	0.215240	0.315296	0.215240	0.315296	0.215240	0.315296	0.215240	0.315296	0.215240	0.315296	0.215240	0.315296	0.215240			
99	0.330207	0.231387	99	0.330207	0.231387	0.231387	0.299852	0.223947	0.315296	0.223947	0.344556	0.223947	0.344556	0.223947	0.344556	0.223947	0.344556	0.223947	0.344556	0.223947	0.344556	0.223947	0.344556	0.223947			
100	0.344556	0.237467	100	0.344556	0.237467	0.237467	0.3058628	0.231387	0.330207	0.231387	0.358628	0.231387	0.358628	0.231387	0.358628	0.231387	0.358628	0.231387	0.358628	0.231387	0.358628	0.231387	0.358628	0.231387			
101	0.358628	0.244834	101	0.358628	0.244834	0.244834	0.344556	0.237467	0.371685	0.237467	0.371685	0.237467	0.371685	0.237467	0.371685	0.237467	0.371685	0.237467	0.371685	0.237467	0.371685	0.237467	0.371685	0.237467			
102	0.371685	0.254498	102	0.371685	0.254498	0.254498	0.366044	0.266044	0.383040	0.266044	0.358628	0.266044	0.383040	0.266044	0.358628	0.266044	0.383040	0.266044	0.383040	0.266044	0.383040	0.266044	0.383040	0.266044			
103	0.383040	0.266044	103	0.383040	0.266044	0.266044	0.379055	0.279055	0.392003	0.279055	0.371685	0.279055	0.392003	0.279055	0.371685	0.279055	0.392003	0.279055	0.392003	0.279055	0.392003	0.279055	0.392003	0.279055			
104	0.392003	0.279055	104	0.392003	0.279055	0.279055	0.293116	0.293116	0.383040	0.293116	0.397886	0.293116	0.383040	0.293116	0.397886	0.293116	0.383040	0.293116	0.383040	0.293116	0.383040	0.293116	0.383040	0.293116			
105	0.397886	0.293116	105	0.397886	0.293116	0.293116	0.307811	0.307811	0.392003	0.307811	0.397886	0.307811	0.392003	0.307811	0.397886	0.307811	0.392003	0.307811	0.397886	0.307811	0.397886	0.307811	0.397886	0.307811			
106	0.400000	0.307811	106	0.400000	0.307811	0.307811	0.322725	0.322725	0.392003	0.322725	0.397886	0.322725	0.392003	0.322725	0.397886	0.322725	0.392003	0.322725	0.397886	0.322725	0.397886	0.322725	0.397886	0.322725			
107	0.400000	0.322725	107	0.400000	0.322725	0.322725	0.337441	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441			
108	0.400000	0.337441	108	0.400000	0.337441	0.337441	0.351544	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544			
109	0.400000	0.351544	109	0.400000	0.351544	0.351544	0.364617	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617			
110	0.400000	0.364617	110	0.400000	0.364617	0.364617	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000			

Disabled Mortality															
		Age Offset		(Years) -->		PERS - All Plans		TRS - All Plans		SERS - All Plans		LEOFF - All Plans		WSP - All Plans	
		Minimum Probability		0.05		0.035		0.03		0.03		0.005		0.005	
Age	Male	Female	Age	Male	Female	Age	Male	Female	Age	Male	Female	Age	Male	Female	
20	0.000345	0.000191	20	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
21	0.000357	0.000192	21	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
22	0.000366	0.000194	22	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
23	0.000373	0.000197	23	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
24	0.000376	0.000201	24	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
25	0.000376	0.000207	25	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
26	0.000378	0.000214	26	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
27	0.000382	0.000223	27	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
28	0.000393	0.000235	28	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
29	0.000412	0.000248	29	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
30	0.000444	0.000264	30	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
31	0.000499	0.000307	31	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
32	0.000562	0.000350	32	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
33	0.000631	0.000394	33	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
34	0.000702	0.000435	34	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
35	0.000773	0.000475	35	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
36	0.000841	0.000514	36	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
37	0.000904	0.000554	37	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
38	0.000964	0.000598	38	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
39	0.001021	0.000648	39	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
40	0.001079	0.000706	40	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
41	0.001142	0.000774	41	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
42	0.001215	0.000852	42	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
43	0.001299	0.000937	43	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	
44	0.001397	0.001029	44	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000	0.005000	0.005000	0.005000	

## Disabled Mortality

(Continued)													
		Age Offset (Years) -->		PERS - all plans		TRS - all plans		SERS - all plans		LEOFF - all plans		WSP - all plans	
				6	6	5	2	5	2	2	2	2	2
RP-2000 Mortality Rates	Combined Healthy	Age	Male	Female	Age	Male	Female	Age	Male	Female	Age	Male	Female
	Age	Minimum Probability	0.05	0.035	45	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000	0.005000
45	0.001508	0.001124	46	0.050000	0.035000	46	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
46	0.001616	0.001223	47	0.050000	0.035000	47	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
47	0.001734	0.001326	48	0.050000	0.035000	48	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
48	0.001860	0.001434	49	0.050000	0.035000	49	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
49	0.001995	0.001550	50	0.050000	0.035000	50	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
50	0.002138	0.001676	51	0.050000	0.035000	51	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
51	0.002449	0.001852	52	0.050000	0.035000	52	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
52	0.002667	0.002018	53	0.050000	0.035000	53	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
53	0.002916	0.002207	54	0.050000	0.035000	54	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
54	0.003196	0.002424	55	0.050000	0.035000	55	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
55	0.003624	0.002717	56	0.050000	0.035000	56	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
56	0.004200	0.003090	57	0.050000	0.035000	57	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
57	0.004693	0.003478	58	0.050000	0.035000	58	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
58	0.005273	0.003923	59	0.050000	0.035000	59	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
59	0.005945	0.004441	60	0.050000	0.035000	60	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
60	0.006747	0.005055	61	0.050000	0.035000	61	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
61	0.007676	0.005814	62	0.050000	0.035000	62	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
62	0.008757	0.006657	63	0.050000	0.035000	63	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
63	0.010012	0.007648	64	0.050000	0.035000	64	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
64	0.011280	0.008619	65	0.050000	0.035000	65	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
65	0.012737	0.009706	66	0.050000	0.035000	66	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
66	0.014409	0.010954	67	0.050000	0.035000	67	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
67	0.016075	0.012163	68	0.050000	0.035000	68	0.050000	0.035000	0.030000	0.017500	0.030000	0.030000	0.005000
68	0.017871	0.013445	69	0.050000	0.035000	69	0.050000	0.035000	0.030000	0.018579	0.033900	0.033900	0.005000

RP-2000 Mortality Rates										Disabled Mortality									
				Age Offset (Years) -->		PERS - all plans		TRS - all plans		SERS - all plans		LEOFF - all plans		WSP - all plans					
Age	Male	Female	Combined Healthy	Age	Male	Female	Probability	0.05	0.035	0.03	0.0175	0.03	0.03	0.005	0.005	0.005	0.005	0.005	
70	0.022206	0.016742		70	0.050000	0.035000	0.035000	0.037834	0.020665	0.037834	0.02169	0.042169	0.042169	0.030000	0.027281	0.020665	0.027281	0.020665	
71	0.024570	0.018579		71	0.050000	0.035000	0.035000	0.042169	0.022970	0.042169	0.030000	0.030387	0.022970	0.030387	0.022970	0.022970	0.022970	0.022970	
72	0.027281	0.020665		72	0.052123	0.037595	0.046906	0.025458	0.046906	0.046906	0.030000	0.033900	0.025458	0.033900	0.025458	0.033900	0.025458	0.025458	
73	0.030387	0.022970		73	0.057927	0.041506	0.052123	0.028106	0.052123	0.028106	0.030000	0.037834	0.028106	0.037834	0.028106	0.028106	0.028106		
74	0.033900	0.025458		74	0.064368	0.045879	0.057927	0.030966	0.057927	0.030966	0.030966	0.042169	0.030966	0.042169	0.030966	0.042169	0.030966		
75	0.037834	0.028106		75	0.072041	0.050780	0.064368	0.034105	0.064368	0.034105	0.064906	0.034105	0.046906	0.034105	0.046906	0.034105	0.034105		
76	0.042169	0.030966		76	0.080486	0.056294	0.072041	0.037595	0.072041	0.037595	0.052123	0.037595	0.052123	0.037595	0.052123	0.037595	0.037595		
77	0.046906	0.034105		77	0.089718	0.062506	0.080486	0.041506	0.080486	0.041506	0.041506	0.057927	0.041506	0.057927	0.041506	0.057927	0.041506		
78	0.052123	0.037595		78	0.099779	0.069517	0.089718	0.045879	0.089718	0.045879	0.043668	0.045879	0.045879	0.043668	0.045879	0.045879			
79	0.057927	0.041506		79	0.110757	0.077446	0.099779	0.050780	0.099779	0.050780	0.050780	0.072041	0.050780	0.072041	0.050780	0.072041	0.050780		
80	0.064368	0.045879		80	0.122797	0.086376	0.110757	0.056294	0.110757	0.056294	0.056294	0.080486	0.056294	0.080486	0.056294	0.080486	0.056294		
81	0.072041	0.050780		81	0.136043	0.096337	0.122797	0.062506	0.122797	0.062506	0.062506	0.089718	0.062506	0.089718	0.062506	0.089718	0.062506		
82	0.080486	0.056294		82	0.150590	0.107303	0.136043	0.069517	0.136043	0.069517	0.069517	0.099779	0.069517	0.099779	0.069517	0.099779	0.069517		
83	0.089718	0.062506		83	0.166420	0.119154	0.150590	0.077446	0.150590	0.077446	0.077446	0.110757	0.077446	0.110757	0.077446	0.110757	0.077446		
84	0.099779	0.069517		84	0.183408	0.131682	0.166420	0.086376	0.166420	0.086376	0.086376	0.122797	0.086376	0.122797	0.086376	0.122797	0.086376		
85	0.110757	0.077446		85	0.199769	0.144604	0.183408	0.096337	0.183408	0.096337	0.096337	0.136043	0.096337	0.136043	0.096337	0.136043	0.096337		
86	0.122797	0.086376		86	0.216605	0.157618	0.199769	0.107303	0.199769	0.107303	0.107303	0.150590	0.107303	0.150590	0.107303	0.150590	0.107303		
87	0.136043	0.096337		87	0.233662	0.170433	0.216605	0.119154	0.216605	0.119154	0.119154	0.166420	0.119154	0.166420	0.119154	0.166420	0.119154		
88	0.150590	0.107303		88	0.250693	0.182799	0.233662	0.131682	0.233662	0.131682	0.131682	0.183408	0.131682	0.183408	0.131682	0.183408	0.131682		
89	0.166420	0.119154		89	0.267491	0.194509	0.250693	0.144604	0.250693	0.144604	0.144604	0.199769	0.144604	0.199769	0.144604	0.199769	0.144604		
90	0.183408	0.131682		90	0.283905	0.205379	0.267491	0.157618	0.267491	0.157618	0.157618	0.216605	0.157618	0.216605	0.157618	0.216605	0.157618		
91	0.199769	0.144604		91	0.299852	0.215240	0.283905	0.170433	0.283905	0.170433	0.170433	0.233662	0.170433	0.233662	0.170433	0.233662	0.170433		
92	0.216605	0.157618		92	0.315296	0.223947	0.299852	0.182799	0.299852	0.182799	0.182799	0.250693	0.182799	0.250693	0.182799	0.250693	0.182799		
93	0.233662	0.170433		93	0.330207	0.231387	0.315296	0.194509	0.315296	0.194509	0.194509	0.267491	0.194509	0.267491	0.194509	0.267491	0.194509		
94	0.250693	0.182799		94	0.344556	0.237467	0.330207	0.205379	0.330207	0.205379	0.205379	0.283905	0.205379	0.283905	0.205379	0.283905	0.205379		

## Disabled Mortality

(Continued)

		Age Offset (Years) -->										Disabled Mortality												
		PERS - all plans				TRS - all plans				SERS - all plans				LEOFF - all plans				WSP - all plans						
		Minimum		Probability		Age		Male		Female		Male		Female		Male		Female		Male		Female		
Age	Combined Healthy	Male	Female	Age	Probability	95	0.358628	0.244834	0.05	0.035	0.03	0.0175	0.03	0.03	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005		
95	0.267491	0.194509		95		95	0.358628	0.244834	0.344556	0.215240	0.344556	0.215240	0.299852	0.215240	0.299852	0.215240	0.299852	0.215240	0.299852	0.215240	0.299852	0.215240		
96	0.283905	0.205379		96		96	0.371685	0.254498	0.358628	0.223947	0.358628	0.223947	0.315296	0.223947	0.315296	0.223947	0.315296	0.223947	0.315296	0.223947	0.315296	0.223947	0.315296	0.223947
97	0.299852	0.215240		97		97	0.383040	0.266044	0.371685	0.231387	0.371685	0.231387	0.330207	0.231387	0.330207	0.231387	0.330207	0.231387	0.330207	0.231387	0.330207	0.231387	0.330207	0.231387
98	0.315296	0.223947		98		98	0.392003	0.279055	0.383040	0.237467	0.383040	0.237467	0.383040	0.237467	0.383040	0.237467	0.344556	0.237467	0.344556	0.237467	0.344556	0.237467	0.344556	0.237467
99	0.330207	0.231387		99		99	0.397886	0.293116	0.392003	0.244834	0.392003	0.244834	0.358628	0.244834	0.358628	0.244834	0.358628	0.244834	0.358628	0.244834	0.358628	0.244834	0.358628	0.244834
100	0.344556	0.237467		100		100	0.400000	0.307811	0.397886	0.254498	0.397886	0.254498	0.371685	0.254498	0.371685	0.254498	0.371685	0.254498	0.371685	0.254498	0.371685	0.254498	0.371685	0.254498
101	0.358628	0.244834		101		101	0.400000	0.322725	0.400000	0.266044	0.400000	0.266044	0.383040	0.266044	0.383040	0.266044	0.383040	0.266044	0.383040	0.266044	0.383040	0.266044	0.383040	0.266044
102	0.371685	0.254498		102		102	0.400000	0.337441	0.400000	0.279055	0.400000	0.279055	0.392003	0.279055	0.392003	0.279055	0.392003	0.279055	0.392003	0.279055	0.392003	0.279055	0.392003	0.279055
103	0.383040	0.266044		103		103	0.400000	0.351544	0.400000	0.293116	0.400000	0.293116	0.397886	0.293116	0.397886	0.293116	0.397886	0.293116	0.397886	0.293116	0.397886	0.293116	0.397886	0.293116
104	0.392003	0.279055		104		104	0.400000	0.364617	0.400000	0.307811	0.400000	0.307811	0.400000	0.307811	0.400000	0.307811	0.400000	0.307811	0.400000	0.307811	0.400000	0.307811	0.400000	0.307811
105	0.397886	0.293116		105		105	0.400000	0.376246	0.400000	0.322725	0.400000	0.322725	0.400000	0.322725	0.400000	0.322725	0.400000	0.322725	0.400000	0.322725	0.400000	0.322725	0.400000	0.322725
106	0.400000	0.307811		106		106	0.400000	0.386015	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441	0.400000	0.337441
107	0.400000	0.322725		107		107	0.400000	0.393507	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544	0.400000	0.351544
108	0.400000	0.337441		108		108	0.400000	0.398308	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617	0.400000	0.364617
109	0.400000	0.351544		109		109	0.400000	0.400000	0.400000	0.376246	0.400000	0.376246	0.400000	0.376246	0.400000	0.376246	0.400000	0.376246	0.400000	0.376246	0.400000	0.376246	0.400000	0.376246
110	0.400000	0.364617		110		110	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Age	Probability of Disablement												
	PERS			TRS			SERS			LEOFF			
	Plan 1		Plan 2/3	Plan 1		Male	Female	Male	Female	Male	Female	Both	Duty
20	0.000000	0.000000	0.000000	0.000000	0.000000	0.000013	0.000014	0.000003	0.000004	0.000000	0.000000	0.001000	0.001000
21	0.000000	0.000000	0.000000	0.000000	0.000000	0.000020	0.000020	0.000005	0.000004	0.000000	0.000000	0.001000	0.001000
22	0.000000	0.000000	0.000000	0.000000	0.000000	0.000029	0.000030	0.000008	0.000006	0.000000	0.000000	0.001000	0.001000
23	0.000000	0.000000	0.000000	0.000000	0.000000	0.000043	0.000043	0.000011	0.000009	0.000000	0.000000	0.001000	0.001000
24	0.000000	0.000000	0.000000	0.000000	0.000000	0.000062	0.000062	0.000016	0.000013	0.000000	0.000000	0.001000	0.001000
25	0.000000	0.000000	0.000000	0.000000	0.000000	0.000091	0.000092	0.000024	0.000019	0.000000	0.000000	0.001000	0.001000
26	0.000000	0.000000	0.000000	0.000000	0.000000	0.000106	0.000107	0.000027	0.000022	0.000000	0.000000	0.002397	0.000850
27	0.000000	0.000000	0.000000	0.000000	0.000000	0.000122	0.000123	0.000032	0.000026	0.000000	0.000000	0.003793	0.000850
28	0.000000	0.000000	0.000000	0.000000	0.000000	0.000141	0.000142	0.000036	0.000030	0.000000	0.000000	0.005187	0.000850
29	0.000000	0.000000	0.000000	0.000000	0.000000	0.000106	0.000106	0.000162	0.000164	0.000042	0.000034	0.000032	0.006578
30	0.000000	0.000000	0.000000	0.000000	0.000000	0.000115	0.000056	0.000187	0.000190	0.000048	0.000040	0.007968	0.000850
31	0.000000	0.000000	0.000000	0.000000	0.000000	0.000125	0.000074	0.000209	0.000212	0.000054	0.000044	0.000064	0.009356
32	0.000000	0.000000	0.000000	0.000000	0.000000	0.000135	0.000093	0.000233	0.000236	0.000060	0.000050	0.000080	0.010742
33	0.000000	0.000000	0.000000	0.000000	0.000000	0.000142	0.000126	0.000258	0.000262	0.000067	0.000055	0.000027	0.000112
34	0.000000	0.000000	0.000000	0.000000	0.000000	0.000149	0.000160	0.000288	0.000292	0.000074	0.000061	0.000054	0.013508
35	0.000310	0.000319	0.000156	0.000194	0.000321	0.000326	0.000083	0.000068	0.000068	0.000081	0.000076	0.014888	0.000850
36	0.000367	0.000377	0.000164	0.000228	0.000340	0.000345	0.000088	0.000072	0.000072	0.000108	0.000072	0.016267	0.000850
37	0.000432	0.000445	0.000171	0.000262	0.000360	0.000365	0.000093	0.000077	0.000077	0.000135	0.000091	0.019033	0.000850
38	0.000508	0.000522	0.000192	0.000266	0.000382	0.000387	0.000099	0.000081	0.000081	0.000176	0.000075	0.020514	0.000850
39	0.000593	0.000610	0.000213	0.000271	0.000404	0.000410	0.000105	0.000086	0.000086	0.000217	0.000086	0.021994	0.000850
40	0.000762	0.000710	0.000235	0.000275	0.000428	0.000434	0.000111	0.000091	0.000091	0.000258	0.000164	0.023471	0.000850
41	0.000873	0.000823	0.000256	0.000279	0.000502	0.000509	0.000130	0.000107	0.000107	0.000300	0.000139	0.024946	0.000850
42	0.000983	0.001257	0.000277	0.000283	0.000588	0.000596	0.000152	0.000125	0.000125	0.000341	0.000113	0.026419	0.000850
43	0.001149	0.001315	0.000344	0.000345	0.000688	0.000698	0.000178	0.000146	0.000146	0.000416	0.000143	0.027889	0.000850
44	0.001315	0.001373	0.000410	0.000406	0.000806	0.000817	0.000208	0.000171	0.000171	0.000492	0.000172	0.036042	0.000850
45	0.001481	0.001431	0.000476	0.000467	0.000944	0.000957	0.000244	0.000201	0.000201	0.000568	0.000201	0.042372	0.000850
46	0.001647	0.001489	0.000542	0.000528	0.001054	0.001068	0.000272	0.000224	0.000224	0.000643	0.000231	0.048661	0.000850
47	0.001813	0.001547	0.000609	0.000589	0.001176	0.001192	0.000304	0.000250	0.000250	0.000719	0.000260	0.054909	0.000850
48	0.002056	0.002039	0.000713	0.000727	0.001312	0.001330	0.000339	0.000279	0.000279	0.000846	0.000419	0.061118	0.000850
49	0.002299	0.002531	0.000817	0.000865	0.001464	0.001483	0.000378	0.000311	0.000311	0.000974	0.000579	0.067287	0.000850

No TRS Plan 1 or PERS Plan 1 disabilities are assumed for members beyond 60 years of age. Ten percent of all PERS Plan 1 disabilities are assumed to be duty related.

LEOFF Plan 1 disability retirements are assumed to continue after service retirement begins

## Probability of Disablement

(Continued)

Age	PERS		TRS		SERS		LEOFF		WSP	
	Plan 1		Plan 2/3		Plan 1		Plan 2/3		Plan 1	
	Male	Female	Male	Female	Male	Female	Male	Female	Both	Duty
50	0.002542	0.003023	0.000922	0.001003	0.001634	0.001656	0.000422	0.000347	0.001102	0.000738
51	0.002784	0.003514	0.001026	0.001141	0.001885	0.001911	0.000487	0.000401	0.001230	0.000897
52	0.003027	0.004006	0.001131	0.001278	0.002177	0.002207	0.000563	0.000463	0.001357	0.001057
53	0.004768	0.004808	0.001631	0.001780	0.002512	0.002546	0.000649	0.000534	0.002048	0.001664
54	0.005505	0.005610	0.002130	0.002281	0.002900	0.002939	0.000750	0.000617	0.002738	0.002270
55	0.008240	0.006411	0.002630	0.002782	0.003347	0.003393	0.000866	0.000712	0.003428	0.002876
56	0.009972	0.007211	0.003129	0.003283	0.003580	0.003629	0.000926	0.000762	0.004117	0.003482
57	0.011701	0.008011	0.003628	0.003783	0.003829	0.003881	0.000990	0.000814	0.004805	0.004087
58	0.011701	0.007508	0.004955	0.005084	0.004096	0.004151	0.001059	0.000871	0.006303	0.004588
59	0.011701	0.007005	0.006280	0.006384	0.004381	0.004440	0.001133	0.000932	0.007799	0.005089
60	0.011701	0.006502	0.007603	0.007681	0.004686	0.004750	0.001212	0.000997	0.009292	0.005589
61	0.011701	0.005998	0.008925	0.008977	0.005219	0.005290	0.001349	0.001110	0.010783	0.006089
62	0.011701	0.005495	0.010244	0.010271	0.005814	0.005892	0.001503	0.001237	0.012272	0.006589
63	0.011701	0.005495	0.010244	0.010271	0.006475	0.006563	0.001674	0.001377	0.012272	0.006589
64	0.011701	0.005495	0.010244	0.010271	0.007213	0.007311	0.001865	0.001534	0.012272	0.006589
65	0.011701	0.005495	0.010244	0.010271	0.000000	0.000000	0.000000	0.000000	0.012272	0.006589
66	0.011701	0.005495	0.010244	0.010271	0.000000	0.000000	0.000000	0.000000	0.012272	0.006589
67	0.011701	0.005495	0.010244	0.010271	0.000000	0.000000	0.000000	0.000000	0.012272	0.006589
68	0.011701	0.005495	0.010244	0.010271	0.000000	0.000000	0.000000	0.000000	0.012272	0.006589
69	0.011701	0.005495	0.010244	0.010271	0.000000	0.000000	0.000000	0.000000	0.012272	0.006589
70	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.121663	0.000850

No TRS Plan 1 or PERS Plan 1 disabilities are assumed for members beyond 60 years of age. Ten percent of all PERS Plan 1 disabilities are assumed to be duty related.

LEOFF Plan 1 disability retirements are assumed to continue after service retirement begins.

Service Years	Probability of Termination									
	PERS - All Plans		TRS - All Plans		SERS - All Plans		LEOFF - Plan 1		LEOFF - Plan 2	
	Male	Female	Male	Female	Male	Female	Male & Female	Male & Female	Male & Female	Male & Female
0	0.2590	0.2639	0.0965	0.1000	0.2590	0.1945	0.1043	0.1034	0.1034	0.0243
1	0.1546	0.1672	0.0600	0.0700	0.1609	0.1287	0.0469	0.0460	0.0460	0.0243
2	0.1020	0.1172	0.0400	0.0550	0.1154	0.1007	0.0237	0.0228	0.0228	0.0243
3	0.0769	0.0925	0.0400	0.0450	0.1007	0.0760	0.0208	0.0199	0.0199	0.0243
4	0.0639	0.0769	0.0350	0.0400	0.0852	0.0658	0.0198	0.0189	0.0189	0.0243
5	0.0531	0.0653	0.0300	0.0350	0.0728	0.0597	0.0194	0.0185	0.0185	0.0138
6	0.0435	0.0587	0.0220	0.0300	0.0606	0.0531	0.0194	0.0185	0.0185	0.0138
7	0.0407	0.0531	0.0210	0.0260	0.0559	0.0521	0.0194	0.0185	0.0185	0.0138
8	0.0373	0.0469	0.0200	0.0200	0.0493	0.0483	0.0167	0.0158	0.0158	0.0138
9	0.0354	0.0411	0.0190	0.0195	0.0464	0.0464	0.0167	0.0158	0.0158	0.0138
10	0.0325	0.0387	0.0180	0.0190	0.0426	0.0450	0.0167	0.0158	0.0158	0.0087
11	0.0310	0.0354	0.0180	0.0170	0.0402	0.0445	0.0142	0.0133	0.0133	0.0087
12	0.0305	0.0315	0.0100	0.0140	0.0383	0.0440	0.0142	0.0133	0.0133	0.0087
13	0.0286	0.0310	0.0100	0.0140	0.0373	0.0440	0.0142	0.0133	0.0133	0.0087
14	0.0276	0.0300	0.0100	0.0140	0.0325	0.0421	0.0099	0.0090	0.0090	0.0087
15	0.0266	0.0286	0.0100	0.0140	0.0296	0.0426	0.0099	0.0090	0.0090	0.0064
16	0.0237	0.0262	0.0095	0.0110	0.0266	0.0378	0.0099	0.0090	0.0090	0.0064
17	0.0213	0.0227	0.0090	0.0090	0.0242	0.0344	0.0070	0.0061	0.0061	0.0064
18	0.0183	0.0198	0.0080	0.0090	0.0203	0.0310	0.0070	0.0061	0.0061	0.0064
19	0.0149	0.0173	0.0070	0.0090	0.0159	0.0262	0.0070	0.0061	0.0061	0.0064
20	0.0114	0.0144	0.0050	0.0050	0.0124	0.0293	0.0070	0.0061	0.0061	0.0019
21	0.0095	0.0114	0.0050	0.0050	0.0114	0.0159	0.0070	0.0061	0.0061	0.0019
22	0.0075	0.0095	0.0050	0.0050	0.0085	0.0129	0.0070	0.0061	0.0061	0.0019
23	0.0060	0.0080	0.0050	0.0050	0.0065	0.0085	0.0070	0.0061	0.0061	0.0019
24	0.0055	0.0055	0.0050	0.0050	0.0065	0.0075	0.0070	0.0061	0.0061	0.0019

## Probability of Termination

(Continued)

Service Years	PERS - All Plans		TRS - All Plans		SERS - All Plans		LEOFF - Plan 1		LEOFF - Plan 2		WSP - All Plans	
	Male	Female	Male	Female	Male	Female	Male & Female	Male & Female	Male & Female	Male & Female	Male & Female	Male & Female
25	0.0050	0.0045	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
26	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
27	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
28	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
29	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
30	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
31	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
32	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
33	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
34	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
35	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
36	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
37	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
38	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
39	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
40	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
41	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
42	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
43	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
44	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
45	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
46	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
47	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
48	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
49	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000
50	0.0040	0.0040	0.0050	0.0050	0.0050	0.0050	0.0075	0.0070	0.0061	0.0061	0.0000	0.0000

Service Years	Probability of Vesting upon Termination*									
	PERS		TRS		SERS		LEOFF		WSP	
	Plan 1	Plan 2	Plan 1	Plan 2	Male & Female	Male & Female				
Years	Male & Female	Male & Female	Male & Female	Male & Female	Male & Female	Male & Female	Male & Female	Male & Female	Male & Female	Male & Female
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.65	0.60	0.50	0.00	0.00	0.00	0.00
5	0.35	0.35	0.65	0.60	0.50	0.15	0.15	0.15	0.15	0.15
6	0.45	0.35	0.75	0.60	0.55	0.15	0.15	0.15	0.15	0.15
7	0.45	0.40	0.75	0.60	0.55	0.15	0.15	0.15	0.15	0.15
8	0.45	0.40	0.75	0.65	0.55	0.15	0.15	0.15	0.15	0.15
9	0.45	0.45	0.75	0.65	0.60	0.15	0.15	0.15	0.15	0.15
10	0.45	0.45	0.75	0.65	0.60	0.15	0.15	0.15	0.15	0.15
11	0.45	0.45	0.75	0.65	0.60	0.15	0.15	0.15	0.15	0.15
12	0.45	0.45	0.75	0.70	0.60	0.15	0.15	0.15	0.15	0.15
13	0.45	0.45	0.85	0.70	0.65	0.15	0.15	0.15	0.15	0.15
14	0.55	0.45	0.85	0.70	0.65	0.15	0.15	0.15	0.15	0.15
15	0.55	0.50	0.85	0.70	0.70	0.15	0.15	0.15	0.15	0.15
16	0.60	0.50	0.85	0.80	0.70	0.15	0.15	0.15	0.15	0.15
17	0.60	0.55	0.85	0.80	0.70	0.15	0.15	0.15	0.15	0.15
18	0.60	0.55	0.85	0.85	0.70	0.35	0.35	0.35	0.35	0.35
19	0.60	0.60	0.85	0.85	0.70	0.35	0.35	0.35	0.35	0.35
20	0.60	0.60	0.90	0.90	0.75	0.75	0.75	0.75	0.75	0.75
21	0.60	0.60	0.90	0.90	0.80	1.00	1.00	1.00	1.00	1.00
22	0.60	0.60	0.90	0.90	0.80	1.00	1.00	1.00	1.00	1.00
23	0.60	0.60	0.90	0.90	0.80	1.00	1.00	1.00	1.00	1.00
24	0.60	0.60	0.90	0.90	0.80	1.00	1.00	1.00	1.00	1.00

For TRS &amp; SERS, service is as of the beginning of the year, and exit is assumed to occur at the end of the year.

\*This assumption is the ratio of terminating members selecting an annuity in lieu of a return of contributions benefit.

**Probability of Vesting upon Termination\***

(for those not eligible to early retire - Continued))

Service Years	PERS				TRS				SERS				LEOFF		WSP	
	Plan 1		Plan 2		Plan 1		Plan 2		Plan 2		Plan 2		Male & Female		Male & Female	
	Male & Female															
25	0.65	0.65	0.65	0.90	0.90	0.90	0.90	0.90	0.80	0.80	0.80	0.80	1.00	1.00	1.00	1.00
26	0.65	0.65	0.65	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
27	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
28	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
29	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
30	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
31	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
32	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
34	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
35	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
36	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
37	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
38	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
39	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
40	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
41	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
42	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
43	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
44	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
45	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
46	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
47	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
48	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
49	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

For TRS &amp; SERS, service is as of the beginning of the year, and exit is assumed to occur at the end of the year.

\*This assumption is the ratio of terminating members selecting an annuity in lieu of a return of contributions benefit.

Service Years	Step Salary Increases						WSP - All Plans		
	PERS - All Plans	TRS - All Plans	% Increase	Salary Ratio	SERS - All Plans	Salary Ratio	% Increase	Salary Ratio	% Increase
1 6.10%	1.275	6.20%	1.476	7.00%	1.280	11.70%	1.810	6.00%	1.678
2 4.80%	1.201	4.40%	1.390	3.90%	1.196	8.10%	1.621	6.00%	1.583
3 3.80%	1.146	4.20%	1.331	2.80%	1.151	6.60%	1.499	6.00%	1.493
4 2.90%	1.104	3.50%	1.278	2.30%	1.120	4.50%	1.406	6.00%	1.409
5 2.10%	1.073	3.10%	1.235	2.20%	1.095	3.20%	1.346	6.00%	1.329
6 1.30%	1.051	2.70%	1.197	1.50%	1.071	2.50%	1.304	6.00%	1.254
7 1.00%	1.038	2.60%	1.166	1.20%	1.055	2.20%	1.272	1.30%	1.183
8 0.80%	1.027	2.30%	1.136	1.00%	1.043	2.00%	1.245	1.30%	1.168
9 0.60%	1.019	2.10%	1.111	0.80%	1.032	2.00%	1.221	1.30%	1.153
10 0.40%	1.013	1.90%	1.088	0.70%	1.024	2.00%	1.197	1.30%	1.138
11 0.30%	1.009	1.70%	1.068	0.70%	1.017	1.90%	1.173	1.30%	1.123
12 0.20%	1.006	1.60%	1.050	0.30%	1.010	1.80%	1.151	1.30%	1.109
13 0.10%	1.004	1.40%	1.033	0.30%	1.007	1.70%	1.131	1.30%	1.095
14 0.10%	1.003	0.90%	1.019	0.20%	1.004	1.60%	1.112	1.30%	1.081
15 0.10%	1.002	0.80%	1.010	0.10%	1.002	1.60%	1.095	1.30%	1.067
16 0.10%	1.001	0.20%	1.002	0.10%	1.001	1.60%	1.077	1.30%	1.053
17 0.00%	1.000	0.00%	1.000	0.00%	1.000	1.60%	1.060	1.30%	1.040
18 0.00%	1.000	0.00%	1.000	0.00%	1.000	1.60%	1.044	1.30%	1.026
19 0.00%	1.000	0.00%	1.000	0.00%	1.000	1.40%	1.027	1.30%	1.013
20 0.00%	1.000	0.00%	1.000	0.00%	1.000	1.30%	1.013	0.00%	1.000
21+	0.00%	1.000	0.00%	1.000	0.00%	1.000	0.00%	1.000	0.00%

## Ratio of Survivors Selecting Annuities\*

Age	PERS 1		PERS 2		PERS 3		TRS 1		TRS 2		TRS 3		SERS 2		SERS 3		LEOFF 1		LEOFF 2		WSP 1		WSP 2			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Both	Both	Both	Both	Both	Both	Both	Both		
20	0.00	0.00	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.20	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26	0.00	0.00	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
27	0.00	0.00	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	0.00	0.00	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
29	0.00	0.00	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.48	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	0.00	0.00	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
31	0.00	0.00	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
32	0.00	0.00	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	0.00	0.00	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
34	0.00	0.00	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.64	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
35	0.00	0.00	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
36	0.00	0.00	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
37	0.00	0.00	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
38	0.00	0.00	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
39	0.00	0.00	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.72	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
40	0.45	0.10	0.05	0.00	0.77	0.76	0.65	0.55	0.00	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.60	0.00	0.60	0.60	0.60	
41	0.45	0.10	0.05	0.00	0.77	0.76	0.65	0.55	0.00	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.60	0.00	0.60	0.60	0.60	
42	0.45	0.10	0.05	0.00	0.77	0.76	0.65	0.55	0.00	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.60	0.00	0.60	0.60	0.60	
43	0.45	0.10	0.05	0.00	0.77	0.76	0.65	0.55	0.00	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.60	0.00	0.60	0.60	0.60	
44	0.45	0.10	0.05	0.00	0.77	0.76	0.65	0.55	0.00	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.05	0.00	0.77	0.76	0.60	0.00	0.60	0.60	0.60	
45	0.55	0.40	0.05	0.00	0.79	0.76	0.65	0.55	0.00	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.60	0.00	0.60	0.60	0.60	
46	0.55	0.40	0.05	0.00	0.79	0.76	0.65	0.55	0.00	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.60	0.00	0.60	0.60	0.60	
47	0.55	0.40	0.05	0.00	0.79	0.76	0.65	0.55	0.00	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.60	0.00	0.60	0.60	0.60	
48	0.55	0.40	0.05	0.00	0.79	0.76	0.65	0.55	0.00	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.60	0.00	0.60	0.60	0.60	
49	0.55	0.40	0.05	0.00	0.79	0.76	0.65	0.55	0.00	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.05	0.00	0.79	0.76	0.60	0.00	0.60	0.60	0.60	
50	0.65	0.45	0.20	0.10	0.80	0.76	0.76	0.65	0.45	0.00	0.15	0.80	0.76	0.20	0.10	0.80	0.76	0.20	0.10	0.80	0.76	0.60	0.25	0.60	0.60	0.60

\*Refers to survivor who selects annuity payments (rather than a lump sum payment) upon active or terminated vested member's death. The LEOFF 2 ratio is 0.60 for duty-related deaths.

## Ratio of Survivors Selecting Annuities\*

(Continued)

Age	PERS 1		PERS 2		PERS 3		TRS 1		TRS 2		TRS 3		SERS 2		SERS 3		LEOFF 1		LEOFF 2		WSP 1		WSP 2	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Both	Both	Both	Both	Both	Both	Both	Both
51	0.65	0.45	0.20	0.10	0.80	0.76	0.65	0.45	0.00	0.15	0.80	0.76	0.20	0.10	0.80	0.76	0.60	0.25	0.60	0.60	0.60	0.60	0.60	0.60
52	0.65	0.45	0.20	0.10	0.80	0.76	0.65	0.45	0.00	0.15	0.80	0.76	0.20	0.10	0.80	0.76	0.60	0.25	0.60	0.60	0.60	0.60	0.60	0.60
53	0.65	0.45	0.20	0.10	0.80	0.76	0.65	0.45	0.00	0.15	0.80	0.76	0.20	0.10	0.80	0.76	0.60	0.25	0.60	0.60	0.60	0.60	0.60	0.60
54	0.65	0.45	0.20	0.10	0.80	0.76	0.65	0.45	0.00	0.15	0.80	0.76	0.20	0.10	0.80	0.76	0.60	0.25	0.60	0.60	0.60	0.60	0.60	0.60
55	0.70	0.45	0.40	0.20	0.81	0.72	0.65	0.45	0.50	0.40	0.81	0.72	0.40	0.20	0.81	0.72	0.60	0.25	0.60	0.60	0.60	0.60	0.60	0.60
56	0.70	0.45	0.40	0.20	0.81	0.72	0.65	0.45	0.50	0.40	0.81	0.72	0.40	0.20	0.81	0.72	0.60	0.25	0.60	0.60	0.60	0.60	0.60	0.60
57	0.70	0.45	0.40	0.20	0.81	0.72	0.65	0.45	0.50	0.40	0.81	0.72	0.40	0.20	0.81	0.72	0.60	0.25	0.60	0.60	0.60	0.60	0.60	0.60
58	0.70	0.45	0.40	0.20	0.81	0.72	0.65	0.45	0.50	0.40	0.81	0.72	0.40	0.20	0.81	0.72	0.60	0.25	0.60	0.60	0.60	0.60	0.60	0.60
59	0.70	0.45	0.40	0.20	0.81	0.72	0.65	0.45	0.50	0.40	0.81	0.72	0.40	0.20	0.81	0.72	0.60	0.25	0.60	0.60	0.60	0.60	0.60	0.60
60	0.70	0.45	0.65	0.20	0.81	0.67	0.75	0.35	0.75	0.50	0.81	0.67	0.65	0.20	0.81	0.67	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
61	0.70	0.45	0.65	0.20	0.81	0.67	0.75	0.35	0.75	0.50	0.81	0.67	0.65	0.20	0.81	0.67	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
62	0.70	0.45	0.65	0.20	0.81	0.67	0.75	0.35	0.75	0.50	0.81	0.67	0.65	0.20	0.81	0.67	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
63	0.70	0.45	0.65	0.20	0.81	0.67	0.75	0.35	0.75	0.50	0.81	0.67	0.65	0.20	0.81	0.67	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
64	0.70	0.45	0.65	0.20	0.81	0.67	0.75	0.35	0.75	0.50	0.81	0.67	0.65	0.20	0.81	0.67	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
65	0.70	0.45	0.65	0.20	0.79	0.58	0.75	0.35	0.75	0.67	0.79	0.58	0.65	0.20	0.79	0.58	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
66	0.70	0.45	0.65	0.20	0.79	0.58	0.75	0.35	0.75	0.67	0.79	0.58	0.65	0.20	0.79	0.58	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
67	0.70	0.45	0.65	0.20	0.79	0.58	0.75	0.35	0.75	0.67	0.79	0.58	0.65	0.20	0.79	0.58	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
68	0.70	0.45	0.65	0.20	0.79	0.58	0.75	0.35	0.75	0.67	0.79	0.58	0.65	0.20	0.79	0.58	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
69	0.70	0.45	0.65	0.20	0.79	0.58	0.75	0.35	0.75	0.67	0.79	0.58	0.65	0.20	0.79	0.58	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
70	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
71	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
72	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
73	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
74	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
75	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
76	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
77	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
78	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
79	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
80	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60

\*Refers to survivor who selects annuity payments (rather than a lump sum payment) upon active or terminated vested member's death. The LEOFF 2 ratio is 0.60 for duty-related deaths.

## Ratio of Survivors Selecting Annuities\*

(Continued)

Age	PERS 1		PERS 2		PERS 3		TRS 1		TRS 2		TRS 3		SERS 2		SERS 3		LEOFF 1		LEOFF 2		WSP 1		WSP 2	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both
81	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
82	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
83	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
84	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
85	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
86	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
87	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
88	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
89	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
90	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
91	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
92	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
93	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
94	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
95	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
96	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
97	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
98	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
99	0.70	0.45	0.65	0.20	0.77	0.47	0.75	0.35	0.75	0.67	0.77	0.47	0.65	0.20	0.77	0.47	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60

\*Refers to survivor who selects annuity payments (rather than a lump sum payment) upon active or terminated vested member's death. The LEOFF 2 ratio is 0.60 for duty-related deaths.

<b>Portability Load</b>			
System	Plan 1	Plan 2	Plan 3
PERS	0.2%	0.3%	0.3%
TRS	0.3%	0.1%	0.1%
SERS	N/A	0.3%	0.3%
LEOFF	N/A	0.1%	N/A
WSP	0.0%	N/A	N/A

*Reflects portability provisions for each plan*

<b>AFC Load</b>	
System/Plan	Load
PERS 1	5.0%
TRS 1	1.0%
WSP 1	7.5%

*Reflects allowances for cashouts of annual and sick leave for calculation of Average Final Compensation*

### **Certain and Life Annuities: Years Certain**

System	Plan 1	Plan 2
PERS	3	3
TRS	11*	4
SERS	N/A	3
LEOFF	N/A	5

*\*Only disabled members get this without a reduction in their benefit*

*The certain period applies to only the "annuity" portion of the benefit, typically 30% of the total benefit*

### **Military Service**

	Percent with Military Service	Average Military Service Months	Overall Average Additional Service Years
<b>PERS 1*</b>			
Males	48%	37	1.48
Females	1%	35	0.03
<b>WSP 1**</b>	<b>43%</b>	<b>32</b>	<b>1.15</b>

*Members with 25 years of service may receive up to 5 years of military service credit*

*\*Members of PERS Plan 1 may use certain prior military service as well as interruptive military service*

*\*\*Members of WSP Plan 1 may use all prior military service as well as interruptive military service*

*Members of WSP Plan 2 (those commissioned on or after January 1, 2003) may use only interruptive military service*

### **Member/Beneficiary Age Difference (In Years)**

System	Male Member	Female Member
PERS	3	(2)
TRS	3	(2)
SERS	3	(2)
LEOFF	4	(4)
WSP	3	(2)

*Age difference is Member age minus Beneficiary age*

### **Duty-Related Death Assumption**

System	Duty Death Rate*
PERS	0.0026%
TRS	0.0008%
SERS	0.0026%
LEOFF 2	0.0200%
WSP	0.0200%

*\*The duty death rate is a constant probability applied, regardless of age. The nonduty death rate is obtained by subtracting duty death rate from mortality rate in any given age. LEOFF 1 rate is 8% of deaths for a given age.*

## Summary of Plan Provisions

Summary of Plan Provisions - PERS			
	Plan 1	Plan 2	Plan 3
Effective Date of Plan	10/1/47	10/1/77	3/1/02
Date Closed to New Entrants	9/30/77	Open	Open
Statutory Reference	Chapter 41.40 RCW	Chapter 41.40 RCW	Chapter 41.40 RCW
Normal Retirement Eligibility (age/service)	60/5, 55/25, Any Age/30	65/5	65/10 or vested
Accrued Benefit Formula	2% x YOS x AFC; Maximum 60% AFC	2% x YOS x AFC	1% x YOS x AFC; 0.25% per month pre-retirement COLA with 20 years of service
Computation of AFC	Annual average of the greatest compensation earnable during a 24 consecutive month period	Average compensation earnable for the highest 60 consecutive months	Average compensation earnable for the highest 60 consecutive months
Credited Service	Monthly, based on hours worked each month (school yr. for edu. empls.)	Monthly, based on hours worked each month (school yr. for edu. empls.)	Monthly, based on hours worked each month (school yr. for edu. empls.)
Vesting	5 years	5 years	10 years (5 under select circumstances)
Vested Benefits Upon Termination	Refund of employee contributions plus interest, or deferred retirement allowance	Refund of employee contributions plus interest, or deferred retirement allowance	Deferred retirement allowance
Early Retirement Eligibility (age/service)	n/a	55/20	55/10
Early Retirement Reduction Factors	n/a	3% ERF with 30 YOS, otherwise actuarial	3% ERF with 30 YOS, otherwise actuarial
Disability Retirement Benefit	Non-duty: reduced accrued benefit; Duty: temporary annuity plus deferred retirement allowance	Accrued benefit, actuarially reduced	Accrued benefit, actuarially reduced
COLA	\$1.25 per month/YOS*** on 7/1/05	Lesser of CPI* or 3%	Lesser of CPI* or 3%
Minimum Benefit per Month / YOS	\$34.22*** on 7/1/05	n/a	n/a
Gain-Sharing Benefit Provisions**	Chapter 41.31 RCW; An additional increase in the COLA amount	n/a	Chapter 41.31A RCW; Cash transfer to the defined contribution account
Changes in Plan Provisions Since Last Valuation	Veterans (C 255 L 05)	EMTs into LEOFF 2 (C 459 L05)	None
Benefits Not Included in This Valuation	Post-retirement employment; gain-sharing (C 370 L 05)	Creation of PSERS (C 242 L 04, Effective 7/1/2006)	Creation of PSERS (C 242 L 04, Effective 7/1/2006); gain- sharing (C 370 L 05)

\*CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bremerton, WA - All Items

\*\*Gain-sharing is calculated every odd year; based on half the 4 year compound average annual return in excess of 10%

\*\*\*COLA increases by 3% annually; Minimum increases by amount of COLA annually

**Summary of Plan Provisions - TRS***Continued*

	Plan 1	Plan 2	Plan 3
<b>Effective Date of Plan</b>	3/1/38	10/1/77	7/1/96
<b>Date Closed to New Entrants</b>	9/30/77	6/30/96	Open
<b>Statutory Reference</b>	Chapter 41.32 RCW	Chapter 41.32 RCW	Chapter 41.32 RCW
<b>Normal Retirement Eligibility (age/service)</b>	60/5, 55/25, Any Age/30	65/5	65/10 or vested
<b>Accrued Benefit Formula</b>	2% x YOS x AFC; Maximum 60% AFC	2% x YOS x AFC	1% x YOS x AFC; 0.25% per month pre-retirement COLA with 20 years of service
<b>Computation of AFC</b>	Annual average earnable compensation for the two highest consecutive service credit years	Average compensation earnable for the highest 60 consecutive months	Average compensation earnable for the highest 60 consecutive months
<b>Credited Service</b>	Yearly, based on days worked each year	Monthly, based on number of months and hours worked during school year	Monthly, based on number of months and hours worked during school year
<b>Vesting</b>	5 years	5 years	10 years (5 under select circumstances)
<b>Vested Benefits Upon Termination</b>	Refund of employee contributions plus interest, or deferred retirement allowance	Refund of employee contributions plus interest, or deferred retirement allowance	Deferred retirement allowance
<b>Early Retirement Eligibility (age/service)</b>	n/a	55/20	55/10
<b>Early Retirement Reduction Factors</b>	n/a	3% ERF with 30 YOS, otherwise actuarial	3% ERF with 30 YOS, otherwise actuarial
<b>Disability Retirement Benefit</b>	Accrued benefit, actuarially reduced	Accrued benefit, actuarially reduced	Accrued benefit, actuarially reduced
<b>COLA</b>	\$1.25 per month/YOS*** on 7/1/05	Lesser of CPI* or 3%	Lesser of CPI* or 3%
<b>Minimum Benefit per Month / YOS</b>	\$34.22*** on 7/1/05	n/a	n/a
<b>Gain-Sharing Benefit Provisions**</b>	Chapter 41.31 RCW; An additional increase in the COLA amount	n/a	Chapter 41.31A RCW; Cash transfer to the defined contribution account
<b>Changes in Plan Provisions Since Last Valuation</b>	Part-time ESAs (C 23 L 05)	None	None
<b>Benefits Not Included in This Valuation</b>	Post-retirement employment; gain-sharing (C 370 L 05)	None	Gain-sharing (C 370 L 05)

*\*CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bremerton, WA - All Items**\*\*Gain-sharing is calculated every odd year; based on half the 4 year compound average annual return in excess of 10%**\*\*\*COLA increases by 3% annually; Minimum increases by amount of COLA annually*

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**Summary of Plan Provisions - SERS**
*Continued*

	Plan 2	Plan 3
Effective Date of Plan	9/1/00	9/1/00
Date Closed to New Entrants	9/1/00	Open
Statutory Reference	Chapter 41.35 RCW	Chapter 41.35 RCW
Normal Retirement Eligibility (age/service)	65/5	65/10 or vested
Accrued Benefit Formula	2% x YOS x AFC	1% x YOS x AFC; 0.25% per month pre-retirement COLA with 20 years of service
Computation of AFC	Average compensation earnable for the highest 60 consecutive months	Average compensation earnable for the highest 60 consecutive months
Credited Service	Monthly, based on number of months and hours worked during school year	Monthly, based on number of months and hours worked during school year
Vesting	5 years	10 years (5 under select circumstances)
Vested Benefits Upon Termination	Refund of employee contributions plus interest, or deferred retirement allowance	Deferred retirement allowance
Early Retirement Eligibility (age/service)	55/20	55/10
Early Retirement Reduction Factors	3% ERF with 30 YOS, otherwise actuarial	3% ERF with 30 YOS, otherwise actuarial
Disability Retirement Benefit	Accrued benefit, actuarially reduced	Accrued benefit, actuarially reduced
COLA	Lesser of CPI* or 3%	Lesser of CPI* or 3%
Minimum Benefit per Month / YOS	n/a	n/a
Gain-Sharing Benefit Provisions**	n/a	Chapter 41.31A RCW; Cash transfer to the defined contribution account
Changes in Plan Provisions Since Last Valuation	None	None
Benefits Not Included in This Valuation	None	Gain-sharing (C 370 L 05)

\*CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bremerton, WA - All Items

\*\*Gain-sharing is calculated every odd year; based on half the 4 year compound average annual return in excess of 10%

**Summary of Plan Provisions - LEOFF***Continued*

	<b>Plan 1</b>	<b>Plan 2</b>
<b>Effective Date of Plan</b>	3/1/70	10/1/77
<b>Date Closed to New Entrants</b>	9/30/77	Open
<b>Statutory Reference</b>	Chapter 41.26 RCW	Chapter 41.26 RCW
<b>Normal Retirement Eligibility (age/service)</b>	50/5	53/5
<b>Accrued Benefit Formula</b>	accrual % (1%, 1.5%, 2%) x YOS (5, 10, 20) x FAS; Maximum 60% FAS	2% x YOS x AFC; 0.25% per month pre-retirement COLA with 20 years of service
<b>Computation of FAS/AFC</b>	The basic salary attached to the position or rank at retirement if held for at least 12 months	Average compensation earnable for the highest 60 consecutive months
<b>Credited Service</b>	Monthly, based on hours worked each month	Monthly, based on hours worked each month
<b>Vesting</b>	5 years	5 years
<b>Vested Benefits Upon Termination</b>	Refund of employee contributions plus interest, or deferred retirement allowance	Refund of employee contributions (x 150% if 10 YOS) plus interest, or deferred retirement allowance
<b>Early Retirement Eligibility (age/service)</b>	n/a	50/20
<b>Early Retirement Reduction Factors</b>	n/a	3% ERF with 20 YOS
<b>Disability Retirement Benefit</b>	50% FAS, (max 60% if children)	Non-duty: accrued benefit, actuarially reduced; Duty: accrued benefit, minimum 10% of AFC
<b>COLA</b>	Full CPI*	Lesser of CPI* or 3%
<b>Minimum Benefit per Month / YOS</b>	n/a	n/a
<b>Gain-Sharing Benefit Provisions</b>	n/a	n/a
<b>Changes in Plan Provisions Since Last Valuation</b>	Ex-spouse survivor benefit (C 62 L 05);	Disability (C 451 L 05); EMTs addition (C 459 L 05)
<b>Benefits Not Included in This Valuation</b>	None	None

\*CPI: *Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bremerton, WA - All Items*

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**Summary of Plan Provisions - WSP**
*Continued*

	Plan 1	Plan 2
<b>Effective Date of Plan</b>	6/12/47	1/1/03
<b>Date Closed to New Entrants</b>	12/31/02	Open
<b>Statutory Reference</b>	Chapter 43.43 RCW	Chapter 43.43 RCW
<b>Normal Retirement Eligibility (age/service)</b>	Age 55, Any Age/25, Mandatory at 60	Age 55, Any Age/25, Mandatory at 60
<b>Accrued Benefit Formula</b>	2% x YOS x AFC; Maximum 75% AFC	2% x YOS x AFC; Maximum 75% AFC
<b>Computation of AFS</b>	Average monthly salary of the highest two consecutive years	Average monthly salary of the highest 60 consecutive months
<b>Credited Service</b>	Monthly, based on hours worked each month	Monthly, based on hours worked each month
<b>Vesting</b>	5 years	5 years
<b>Vested Benefits Upon Termination</b>	Refund of employee contributions plus interest, or deferred retirement allowance	Refund of employee contributions plus interest, or deferred retirement allowance
<b>Early Retirement Eligibility (age/service)</b>	n/a	n/a
<b>Early Retirement Reduction Factors</b>	n/a	n/a
<b>Disability Retirement Benefit</b>	50% comp with offsets, paid from WSP operational funds	50% comp with offsets, paid from WSP operational funds
<b>COLA</b>	Lesser of CPI* or 3%	Lesser of CPI* or 3%
<b>Minimum Benefit per Month/YOS**</b>	\$24.45 on 1/1/05	\$24.45 on 1/1/05
<b>Gain-Sharing Benefit Provisions</b>	n/a	n/a
<b>Changes in Plan Provisions Since Last Valuation</b>	None	None
<b>Benefits Not Included in This Valuation</b>	None	None

\*CPI: Urban Wage Earners &amp; Clerical Workers, Seattle-Tacoma-Bremerton, WA - All Items

\*\*Amount increases by 3% annually

Early Retirement Reduction Factors				Early Retirement Reduction Factors			
Years Early	Plan 2/3, PERS 1 TrmVst	LEOFF2, PERS1, TRS1, WSP TrmVst	Plan 2/3 Subsidized 3%*	Years Early	Plan 2/3, PERS 1 TrmVst	LEOFF2, PERS1, TRS1, WSP TrmVst	Plan 2/3 Subsidized 3%*
0	1.0000	1.0000	1.00	25	0.1100	0.1400	N/A
1	0.9100	0.9200	0.97	26	0.1000	0.1300	N/A
2	0.8200	0.8400	0.94	27	0.1000	0.1200	N/A
3	0.7300	0.7600	0.91	28	0.1000	0.1100	N/A
4	0.6700	0.7100	0.88	29	0.1000	0.1000	N/A
5	0.6100	0.6600	0.85	30	0.1000	0.1000	N/A
6	0.5500	0.6100	0.82	31	0.1000	0.1000	N/A
7	0.4900	0.5600	0.79	32	0.1000	0.1000	N/A
8	0.4300	0.5100	0.76	33	0.1000	0.1000	N/A
9	0.4000	0.4700	0.73	34	0.1000	0.1000	N/A
10	0.3700	0.4300	0.70	35	0.1000	0.1000	N/A
11	0.3400	0.3900	N/A	36	0.1000	0.1000	N/A
12	0.3100	0.3500	N/A	37	0.1000	0.1000	N/A
13	0.2800	0.3100	N/A	38	0.1000	0.1000	N/A
14	0.2600	0.2900	N/A	39	0.1000	0.1000	N/A
15	0.2400	0.2700	N/A	40	0.1000	0.1000	N/A
16	0.2200	0.2500	N/A	41	0.1000	0.1000	N/A
17	0.2000	0.2300	N/A	42	0.1000	0.1000	N/A
18	0.1800	0.2100	N/A	43	0.1000	0.1000	N/A
19	0.1700	0.2000	N/A	44	0.1000	0.1000	N/A
20	0.1600	0.1900	N/A	45	0.1000	0.1000	N/A
21	0.1500	0.1800	N/A	46	0.1000	0.1000	N/A
22	0.1400	0.1700	N/A	47	0.1000	0.1000	N/A
23	0.1300	0.1600	N/A	48	0.1000	0.1000	N/A
24	0.1200	0.1500	N/A	49	0.1000	0.1000	N/A

TrmVst=Terminated Vested.

\*LEOFF 2 members must be at least age 50 with 20 or more years of service to qualify.

All other plan 2/3 members must be at least 55 with 30 years of service to qualify.

TrmVst=Terminated Vested.

\*LEOFF 2 members must be at least age 50 with 20 or more years of service to qualify.

All other plan 2/3 members must be at least 55 with 30 years of service to qualify.

## Age/Service Distributions

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\*Annual Salary omitted for privacy reasons

**Age and Service Distribution of Active Members  
(Number of Actives and Average Salary)**

(Continued)

PERS Plan 2: Attained Age		Attained Years of Service										Total			
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	894	895	405	307	143	73	0	0	0	0	0	0	0	0	2,717
25-29	\$27,788	\$26,336	\$27,762	\$28,775	\$32,711	\$34,529	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,858
30-34	906	1,330	1,214	1,406	1,157	1,674	16	0	0	0	0	0	0	0	7,703
35-39	\$31,063	\$31,816	\$35,076	\$36,441	\$37,629	\$39,246	\$40,259	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,591
40-44	740	1,134	1,168	1,449	1,413	4,519	974	37	0	0	0	0	0	0	11,434
45-49	\$32,805	\$34,599	\$37,067	\$39,976	\$40,251	\$44,088	\$45,138	\$49,472	\$0	\$0	\$0	\$0	\$0	\$0	\$40,811
50-54	650	1,051	1,006	1,256	1,309	4,724	3,037	864	25	0	0	0	0	0	13,922
55-59	\$34,417	\$35,932	\$38,439	\$40,962	\$42,243	\$45,645	\$49,018	\$47,946	\$45,560	\$0	\$0	\$0	\$0	\$0	\$44,003
60-64	624	1,041	1,023	1,267	1,311	4,841	3,838	2,701	953	63	0	0	0	0	17,662
65-69	\$34,073	\$34,277	\$39,005	\$40,156	\$41,555	\$45,412	\$49,915	\$52,226	\$51,511	\$49,949	\$0	\$0	\$0	\$0	\$45,686
70 & Over	12	47	34	18	29	105	85	81	33	19	0	0	0	0	463
<b>Total</b>	<b>5,273</b>	<b>7,884</b>	<b>7,260</b>	<b>8,829</b>	<b>8,705</b>	<b>29,669</b>	<b>21,541</b>	<b>15,971</b>	<b>9,639</b>	<b>3,797</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>118,572</b>
Average:	Age	45.1	Number of Participants:		Vested	76,987	Males		57,127	Early Retirement Eligible:		4,919			
	Service	9.4	Number of Participants:		Not Vested	41,585	Females		61,445	Normal Retirement Eligible:		1,755			

\*Annual Salary omitted for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members**  
**(Number of Actives and Average Salary)**

(Continued)

**PERS Plan 3:**  
**Attained Age**

	Attained Age	Attained Years of Service										Total				
		0	1	2	3	4	5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	Total
Under 25	534	449	131	14	5	1	0	0	0	0	0	0	0	0	0	1,134
	\$26,595	\$25,782	\$29,482	\$30,615	\$39,036	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,718
25-29	492	707	462	105	91	139	7	0	0	0	0	0	0	0	0	2,003
	\$29,848	\$31,313	\$35,396	\$39,823	\$37,702	\$41,710	\$46,491	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,406
30-34	380	501	374	121	113	612	196	1	0	0	0	0	0	0	0	2,298
	\$33,326	\$34,357	\$38,590	\$42,108	\$42,009	\$46,058	\$47,195	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,876
35-39	272	427	284	97	125	597	646	142	2	0	0	0	0	0	0	2,592
	\$34,062	\$35,229	\$39,087	\$42,302	\$45,402	\$48,300	\$52,544	\$51,322	\$64,045	\$0	\$0	\$0	\$0	\$0	\$0	\$44,514
40-44	245	332	227	112	99	506	787	584	182	13	0	0	0	0	0	3,087
	\$32,724	\$34,107	\$38,562	\$45,745	\$44,546	\$49,313	\$54,128	\$54,926	\$55,252	\$64,608	\$0	\$0	\$0	\$0	\$0	\$47,992
45-49	248	349	227	86	100	488	772	697	434	133	0	0	0	0	0	3,534
	\$32,954	\$36,347	\$41,539	\$44,654	\$48,581	\$46,468	\$52,166	\$55,700	\$57,693	\$53,325	\$0	\$0	\$0	\$0	\$0	\$48,921
50-54	143	242	184	69	72	424	596	578	381	158	0	0	0	0	0	2,847
	\$35,251	\$38,015	\$41,015	\$47,094	\$44,342	\$46,449	\$51,361	\$54,395	\$58,596	\$59,294	\$0	\$0	\$0	\$0	\$0	\$49,761
55-59	89	153	92	33	37	225	370	341	271	99	0	0	0	0	0	1,710
	\$33,192	\$37,670	\$43,854	\$44,222	\$46,038	\$44,958	\$49,407	\$51,979	\$57,980	\$60,159	\$0	\$0	\$0	\$0	\$0	\$48,950
60-64	32	51	38	10	16	64	122	113	62	31	0	0	0	0	0	539
	\$34,700	\$40,042	\$38,055	\$44,377	\$42,740	\$44,205	\$44,763	\$48,585	\$61,090	\$64,147	\$0	\$0	\$0	\$0	\$0	\$46,907
65-69	13	18	9	2	7	12	6	10	8	3	0	0	0	0	0	88
	\$33,078	\$38,490	\$33,392	\$31,015	\$34,944	\$37,262	\$51,794	\$55,643	\$44,581	\$62,435	\$0	\$0	\$0	\$0	\$0	\$40,776
70 & Over	5	6	1	2	1	5	0	1	2	0	0	0	0	0	0	23
	\$34,000	\$28,987	*	\$29,023	*	\$44,994	\$0	*	\$35,160	\$0	\$0	\$0	\$0	\$0	\$0	\$33,469
<b>Total</b>	<b>2,453</b>	<b>3,235</b>	<b>2,029</b>	<b>651</b>	<b>666</b>	<b>3,073</b>	<b>3,502</b>	<b>2,467</b>	<b>437</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,855</b>	
	\$31,272	\$33,339	\$38,085	\$43,079	\$43,788	\$46,793	\$51,700	\$54,107	\$57,731	\$58,197	\$0	\$0	\$0	\$0	\$0	\$44,335
Average:	Age	41.8	Number of Participants:			Vested	9,447	Males	9,528	Early Retirement Eligible:				1,409		
	Service	7.9	Number of Participants:			Not Vested	10,408	Females	10,327	Normal Retirement Eligible:				30		

<sup>a</sup>Annual Salary committed for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members  
(Number of Actives and Average Salary)**

(Continued)

TRS Plan 1: Attained Age	Attained Years of Service										Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30-34	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-49	\$0	1	2	0	1	6	6	14	29	60	0	0	0	119
50-54	\$38,865	15	12	16	21	15	100	198	324	458	\$68,358	\$0	\$0	\$62,289
55-59	\$40,000	14	14	21	24	24	136	317	582	690	1,239	1,115	192	3,582
60-64	\$37,867	9	8	6	6	12	73	133	267	235	299	\$66,346	*	\$63,387
65-69	* \$0	1	1	1	2	1	7	16	28	17	38	37	25	4,368
70 & Over	Total	39	36	47	53	54	322	671	1,218	1,434	3,560	1,911	463	54
	Average:	Age	56.1	Number of Participants:	Vested	9,617	Males	2,828	Early Retirement Eligible:	N/A				
		Service	24.3	Not Vested	245	Females	7,034	Normal Retirement Eligible:	4,792					

\*Annual Salary omitted for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members  
(Number of Actives and Average Salary)**

(Continued)

**TRS Plan 2:****Attained Age**

		Attained Years of Service																											
		0		1		2		3		4		5-9		10-14		15-19		20-24		25-29		30-34		35-39		40 & Over		Total	
	Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
25-29		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
30-34	1	6	2	6	2	6	3	145	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	220			
35-39	*	\$43,582	\$39,184	\$43,110	\$41,376	\$47,712	\$50,510	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,000			
40-44	13	15	23	14	32	247	364	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	723		
45-49	\$39,397	\$39,977	\$41,440	\$48,019	\$45,200	\$48,650	\$52,895	\$56,243	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,204			
50-54	16	28	31	32	35	246	376	206	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	996		
55-59	16	21	39	39	39	301	461	263	214	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,440			
60-64	\$45,769	\$42,322	\$42,154	\$42,394	\$44,403	\$49,174	\$54,678	\$59,095	\$62,092	\$64,591	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54,530			
65-69	13	16	22	23	35	263	612	332	221	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,625			
70 & Over	\$40,000	\$45,842	\$51,020	\$47,946	\$46,165	\$50,637	\$56,107	\$60,126	\$61,470	\$63,159	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56,525			
Total	67	95	132	130	170	1,517	2,796	1,428	841	294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,470				
Average:	Age	50.1	Number of Participants:	Vested	6,835						Males	1,940														485			
	Service	12.8	Number of Participants:	Not Vested	635						Females	5,530														157			

\*Annual Salary omitted for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members  
(Number of Actives and Average Salary)**

(Continued)

**TRS Plan 3:**  
**Attained Age**

	Attained Age	Attained Years of Service										Total			
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	616	228	59	1	0	0	0	0	0	0	0	0	0	0	904
	\$39,986	\$34,565	\$34,743	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,274
25-29	1,136	1,128	1,190	1,322	944	637	0	0	0	0	0	0	0	0	6,357
	\$40,079	\$36,570	\$37,149	\$37,738	\$39,780	\$41,971	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,566
30-34	502	597	630	875	888	3,821	334	0	0	0	0	0	0	0	7,647
	\$40,236	\$39,076	\$39,571	\$40,591	\$41,667	\$45,510	\$52,189	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,455
35-39	376	356	366	492	442	2,358	2,251	268	0	0	0	0	0	0	6,909
	\$40,374	\$40,160	\$40,918	\$41,255	\$43,138	\$47,591	\$54,757	\$59,246	\$0	\$0	\$0	\$0	\$0	\$0	\$48,513
40-44	331	286	350	415	338	1,481	1,691	1,701	239	0	0	0	0	0	6,832
	\$40,885	\$40,117	\$40,260	\$42,122	\$43,497	\$48,726	\$56,654	\$62,079	\$64,228	\$0	\$0	\$0	\$0	\$0	\$52,721
45-49	282	305	354	383	337	1,493	1,562	1,376	1,454	348	0	0	0	0	7,894
	\$40,578	\$39,928	\$41,506	\$42,024	\$43,756	\$48,515	\$56,880	\$61,342	\$64,207	\$65,767	\$0	\$0	\$0	\$0	\$54,609
50-54	197	227	253	311	345	1,397	1,583	1,301	1,014	622	0	0	0	0	7,250
	\$41,438	\$41,234	\$43,671	\$44,792	\$45,901	\$49,811	\$57,570	\$62,051	\$64,288	\$64,832	\$0	\$0	\$0	\$0	\$55,903
55-59	89	110	151	166	192	801	956	957	609	290	0	0	0	0	4,321
	\$42,571	\$46,657	\$46,782	\$50,128	\$49,648	\$52,555	\$58,309	\$62,141	\$64,453	\$65,921	\$0	\$0	\$0	\$0	\$57,745
60-64	23	29	42	51	39	179	204	230	189	91	0	0	0	0	1,077
	\$46,694	\$51,162	\$54,114	\$51,240	\$47,745	\$54,179	\$59,716	\$61,581	\$63,353	\$65,635	\$0	\$0	\$0	\$0	\$58,771
65-69	4	5	8	7	4	22	17	13	11	7	0	0	0	0	98
	\$40,000	\$52,829	\$50,438	\$49,701	\$56,971	\$53,636	\$60,840	\$62,055	\$64,880	\$65,941	\$0	\$0	\$0	\$0	\$57,140
70 & Over	1	0	0	1	1	*	*	*	\$61,338	\$45,183	*	\$66,906	\$0	\$0	13
	*	\$0	\$0	\$0	*	*	*	*	*	*	*	*	*	\$0	\$59,871
<b>Total</b>	<b>3,557</b>	<b>3,271</b>	<b>3,403</b>	<b>4,024</b>	<b>3,530</b>	<b>12,194</b>	<b>8,600</b>	<b>5,847</b>	<b>3,518</b>	<b>1,358</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49,302</b>
	<b>\$40,411</b>	<b>\$38,719</b>	<b>\$39,887</b>	<b>\$40,907</b>	<b>\$42,658</b>	<b>\$47,590</b>	<b>\$56,456</b>	<b>\$61,761</b>	<b>\$64,232</b>	<b>\$65,364</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$49,958</b>
Average:	Age	41.5	Number of Participants:	Vested	19,979	Males	14,510	Early Retirement Eligible:	3,526						
	Service	8.7	Not Vested	29,323	Females	34,792	Normal Retirement Eligible:	53							

\*Annual Salary omitted for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members**  
**(Number of Actives and Average Salary)**

(Continued)

**SERS Plan 2:**  
**Attained Age**

	Under 25	Attained Years of Service										Total			
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	Total
	1 *	\$15,810	\$20,157	\$16,803	\$27,476	\$24,761	\$0	\$0	\$0	0	0	0	0	0	57
25-29	14 27	\$17,441	\$17,596	\$22,762	\$22,508	\$23,720	\$31,610	\$0	0	0	0	\$0	\$0	\$0	\$22,179
30-34	27 32	\$19,889	\$18,970	\$19,325	\$23,127	\$21,572	\$26,398	\$25,971	\$28,617	\$0	0	0	0	0	405
35-39	35 53	\$19,857	\$16,359	\$21,409	\$19,594	\$20,804	\$23,946	\$28,256	\$34,126	\$36,316	\$0	\$0	\$0	\$0	\$22,542
40-44	31 74	\$19,393	\$16,256	\$18,814	\$17,034	\$18,535	\$21,873	\$25,726	\$31,566	\$36,008	\$37,085	\$0	\$0	\$0	832
45-49	59 87	\$20,492	\$17,771	\$17,179	\$18,219	\$19,343	\$21,262	\$23,746	\$29,382	\$36,172	\$38,843	\$0	\$0	\$0	\$24,613
50-54	32 53	\$19,750	\$17,429	\$18,202	\$18,176	\$20,053	\$22,189	\$22,984	\$26,787	\$36,231	\$41,113	\$0	\$0	\$0	1,459
55-59	18 36	\$20,444	\$18,742	\$19,821	\$19,359	\$21,816	\$23,339	\$24,321	\$26,292	\$31,251	\$35,536	\$0	\$0	\$0	\$23,807
60-64	9 12	\$21,000	\$15,021	\$14,207	\$16,016	\$20,440	\$23,437	\$25,013	\$27,126	\$28,536	\$33,426	\$0	\$0	\$0	3,153
65-69	1 6 *	\$13,513	\$14,167	\$18,546	\$22,342	\$23,056	\$27,096	\$28,103	\$27,444	\$0	\$0	\$0	\$0	\$0	512
70 & Over	2 0	\$21,000	\$0	\$14,333	\$15,899	\$12,938	\$18,104	\$18,175	\$24,619	\$26,367	\$37,926	\$0	\$0	\$0	166
<b>Total</b>	<b>229 385</b>	<b>\$20,127</b>	<b>\$17,266</b>	<b>\$18,502</b>	<b>\$18,543</b>	<b>\$20,062</b>	<b>\$22,488</b>	<b>\$24,156</b>	<b>\$27,652</b>	<b>\$31,860</b>	<b>\$36,047</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>20,424</b>
Average:	Age Service	49.1 9.4	Number of Participants:	Vested	15,880	Males	4,561	Early Retirement Eligible:		859				859	
			Not Vested	4,544	Females	15,863	Normal Retirement Eligible:		612				612		

\*Annual Salary omitted for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members  
(Number of Actives and Average Salary)**

(Continued)

SERS Plan 3: Attained Age		Attained Years of Service										Total			
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	303	208	124	73	35	3	0	0	0	0	0	0	0	0	746
	\$20,571	\$17,394	\$18,361	\$19,196	\$25,153	\$31,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,443
25-29	319	287	240	222	107	58	3	0	0	0	0	0	0	0	1,236
	\$20,698	\$19,230	\$21,804	\$23,133	\$25,331	\$30,405	\$32,662	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,895
30-34	312	367	307	237	161	211	78	1	0	0	0	0	0	0	1,674
	\$20,615	\$18,723	\$21,351	\$23,782	\$26,659	\$29,649	\$31,619	*	\$0	\$0	\$0	\$0	\$0	\$0	\$23,032
35-39	480	524	481	424	279	436	237	66	2	0	0	0	0	0	2,929
	\$20,639	\$17,300	\$19,226	\$20,964	\$22,897	\$26,368	\$31,554	\$34,747	\$36,151	\$0	\$0	\$0	\$0	\$0	\$22,136
40-44	590	720	712	699	412	961	609	224	86	7	0	0	0	0	5,020
	\$20,445	\$16,509	\$18,905	\$19,928	\$20,613	\$22,870	\$29,312	\$36,205	\$42,218	\$37,456	\$0	\$0	\$0	\$0	\$22,243
45-49	462	628	587	581	482	1,308	1,412	522	227	54	0	0	0	0	6,263
	\$20,367	\$16,994	\$18,932	\$20,917	\$20,660	\$22,291	\$25,255	\$33,486	\$38,978	\$42,901	\$0	\$0	\$0	\$0	\$23,434
50-54	271	384	371	428	317	967	1,562	987	335	88	0	0	0	0	5,710
	\$20,420	\$17,865	\$20,425	\$21,234	\$21,068	\$23,044	\$24,074	\$28,107	\$34,556	\$39,346	\$0	\$0	\$0	\$0	\$24,239
55-59	186	221	215	263	150	397	1,031	918	476	115	0	0	0	0	3,972
	\$20,383	\$18,809	\$21,995	\$23,234	\$24,444	\$24,336	\$24,494	\$27,162	\$29,492	\$36,451	\$0	\$0	\$0	\$0	\$25,311
60-64	75	114	105	110	85	140	278	333	236	71	0	0	0	0	1,547
	\$20,101	\$17,417	\$18,869	\$21,658	\$22,711	\$21,367	\$23,534	\$25,875	\$28,948	\$32,601	\$0	\$0	\$0	\$0	\$23,971
65-69	23	33	32	24	15	29	41	34	18	4	0	0	0	0	253
	\$19,696	\$16,272	\$17,666	\$16,037	\$19,479	\$21,137	\$23,770	\$26,184	\$24,490	\$23,158	\$0	\$0	\$0	\$0	\$20,726
70 & Over	8	9	17	7	10	5	15	7	0	2	0	0	0	0	80
	\$21,000	\$12,838	\$16,904	\$12,913	\$22,793	\$16,654	\$20,444	\$25,272	\$0	\$22,425	\$0	\$0	\$0	\$0	\$18,761
<b>Total</b>	<b>3,029</b>	<b>3,495</b>	<b>3,191</b>	<b>3,068</b>	<b>2,053</b>	<b>4,515</b>	<b>5,266</b>	<b>3,092</b>	<b>1,380</b>	<b>341</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29,430</b>
	\$20,502	\$17,535	\$19,751	\$21,252	\$22,171	\$23,561	\$25,491	\$29,201	\$32,926	\$37,200	\$0	\$0	\$0	\$0	\$23,315
Average:	Age	46.2	Number of Participants:		Vested	11,060	Males	6,210	Early Retirement Eligible:		3,458				
	Service	7.2	Not Vested		Females	18,370	Females	23,220	Normal Retirement Eligible:		121				

\*Annual salary omitted for privacy reasons  
Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members  
(Number of Actives and Average Salary)**

(Continued)

**LEOFF Plan 1:****Attained Age**

	Attained Age	Attained Years of Service										Total		
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30-34	\$0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35-39	\$0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40-44	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
45-49	0	0	0	0	0	0	\$0	* \$60,969	\$75,190	\$88,283	\$0	\$0	\$0	62
50-54	0	0	0	0	0	1	0	3	5	193	141	0	0	343
55-59	\$0	\$0	\$0	\$0	\$0	*	\$0	\$67,954	\$75,096	\$75,482	\$77,677	\$0	\$0	\$76,178
60-64	0	0	0	0	0	0	1	0	0	2	93	210	47	0
65-69	\$0	\$0	\$0	\$0	\$0	*	\$0	\$85,741	\$71,795	\$73,817	\$81,823	\$0	\$0	\$74,380
70 & Over	0	0	0	0	0	0	0	0	1	14	35	28	1	79
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>12</b>	<b>352</b>	<b>395</b>	<b>78</b>	<b>4</b>	<b>848</b>	
Average:	Age Service	54.8 30.2	Number of Participants:	Vested 0	Not Vested	848	Males Females	836 12	Early Retirement Eligible: N/A	Normal Retirement Eligible: 786				

<sup>a</sup>Annual Salary omitted for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members  
(Number of Actives and Average Salary)**

(Continued)

LEOFF Plan 2: Attained Age		Attained Years of Service										Total			
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	33	54	36	14	2	1	0	0	0	0	0	0	0	0	140
	\$42,045	\$45,567	\$50,820	\$57,323	\$66,825	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47,710
25-29	76	245	222	248	210	270	0	0	0	0	0	0	0	0	1,271
	\$44,223	\$46,250	\$52,730	\$57,682	\$60,264	\$65,653	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,928
30-34	72	182	211	265	242	1,385	306	1	0	0	0	0	0	0	2,664
	\$44,247	\$48,648	\$54,576	\$56,832	\$61,099	\$66,400	\$70,605	*	\$0	\$0	\$0	\$0	\$0	\$0	\$62,712
35-39	36	110	94	167	139	1,115	1,233	324	1	0	0	0	0	0	3,219
	\$44,815	\$49,485	\$56,809	\$56,723	\$62,671	\$67,385	\$72,055	\$77,538	*	\$0	\$0	\$0	\$0	\$0	\$68,270
40-44	14	56	44	73	75	512	896	930	288	8	0	0	0	0	2,896
	\$46,896	\$52,536	\$59,843	\$57,587	\$61,709	\$66,484	\$72,520	\$76,623	\$81,184	\$83,797	\$0	\$0	\$0	\$0	\$72,304
45-49	7	32	27	27	26	205	444	618	783	300	0	0	0	0	2,469
	\$42,755	\$53,309	\$69,328	\$58,564	\$65,772	\$63,594	\$71,948	\$76,234	\$81,776	\$84,181	\$0	\$0	\$0	\$0	\$76,366
50-54	9	18	23	11	16	115	166	291	506	368	0	0	0	0	1,523
	\$45,753	\$60,295	\$70,891	\$67,758	\$62,638	\$63,170	\$71,078	\$75,075	\$79,202	\$79,439	\$0	\$0	\$0	\$0	\$75,571
55-59	1	15	9	9	8	35	47	86	146	103	1	0	0	0	460
	*	\$54,541	\$70,747	\$76,249	\$74,925	\$64,722	\$70,697	\$72,309	\$76,275	\$81,173	*	\$0	\$0	\$0	\$74,263
60-64	1	3	5	2	0	10	24	26	22	11	0	0	0	0	104
	*	\$76,242	\$41,464	\$61,120	\$0	\$79,461	\$63,751	\$75,361	\$68,403	\$73,955	\$0	\$0	\$0	\$0	\$69,402
65-69	1	0	0	0	0	0	2	4	0	0	0	0	0	0	7
	*	\$0	\$0	\$0	\$0	\$0	\$50,968	\$63,679	\$0	\$0	\$0	\$0	\$0	\$0	\$56,601
70 & Over	0	0	0	0	0	0	1	0	0	0	0	0	0	1	*
	\$0	\$0	\$0	\$0	\$0	\$0	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	*
<b>Total</b>	<b>250</b>	<b>715</b>	<b>671</b>	<b>816</b>	<b>718</b>	<b>3,648</b>	<b>3,119</b>	<b>2,280</b>	<b>1,746</b>	<b>790</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,754</b>
Average:	Age	40.1	Number of Participants:		Vested	11,231	Males		13,548	Early Retirement Eligible:		615			
	Service	11.3	Not Vested		3,523	Females		1,206	Normal Retirement Eligible:		951				

\*Annual Salary omitted for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members**  
**(Number of Actives and Average Salary)**

(Continued)

		Attained Years of Service																											
		0		1		2		3		4		5-9		10-14		15-19		20-24		25-29		30-34		35-39		40 & Over		Total	
		Attained Age																											
		Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		25-29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
		30-34	0	0	1	18	19	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74		
		35-39	\$0	\$0	*	\$49,769	\$50,380	\$54,816	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$52,368		
		40-44	0	0	*	\$48,341	\$47,696	\$52,677	\$58,973	\$62,381	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	197		
		45-49	\$0	\$0	\$46,198	\$48,782	\$49,326	\$58,601	\$64,131	\$65,222	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61,401		
		50-54	0	0	0	2	1	35	36	127	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	219		
		55-59	\$0	\$0	\$46,905	*	\$56,711	\$64,710	\$64,781	\$69,281	\$75,881	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$64,399		
		60-64	0	0	0	1	0	7	3	10	9	25	10	0	0	0	0	0	0	0	0	0	0	0	0	0	142		
		65-69	\$0	\$0	\$0	*	\$57,342	\$57,467	\$63,732	\$69,653	\$70,181	\$68,793	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67,550		
		70 & Over	0	0	0	0	0	4	1	4	2	1	16	2	0	0	0	0	0	0	0	0	0	0	0	0	65		
		Total	0	1	6	43	40	347	169	234	68	61	26	2	0	0	0	0	0	0	0	0	0	0	0	0	997		
			\$0	*	\$47,708	\$48,695	\$51,403	\$58,255	\$63,430	\$65,582	\$69,648	\$73,367	\$66,997	\$62,343	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$62,042		
Average:	Service			39.4	Number of Participants:	Vested	855	Males	919	Early Retirement Eligible:	N/A																		
				12.8	Not Vested	142	Females	78	Normal Retirement Eligible:	100																			

<sup>\*</sup>Annual Salary omitted for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

**Age and Service Distribution of Active Members  
(Number of Actives and Average Salary)**

(Continued)

WSP Plan 2: Attained Age	Attained Years of Service										Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	0	0	2	1	0	0	0	0	0	0	0	0	0	3
25-29	\$0	\$0	\$41,396	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42,372
30-34	0	2	22	10	0	0	0	0	0	0	0	0	0	34
35-39	\$0	\$43,237	\$43,193	\$45,122	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,763
40-44	0	0	14	5	0	0	0	0	0	0	0	0	0	19
45-49	\$0	*	\$45,537	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45,256
50-54	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>3</b>	<b>41</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>						
Average:	Age	29.1	Number of Participants:	Vested	0						Males	55		
	Service	2.0		Not Vested	60						Females	5		
											Early Retirement Eligible:	N/A		
											Normal Retirement Eligible:	0		

\*Annual Salary omitted for privacy reasons

Numbers of participants eligible for early and normal retirement are estimates only.

## Age/Years Retired Distributions

**PERS Plan 1:**  
Age and Years Retired Distribution of All Annuitant Members  
(Number of All Annuitant Members and Average Monthly Benefit)

	Attained Age	Attained Years Retired										Total		
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over
Under 50	19	16	8	9	10	58	17	6	9	6	2	1	0	161
\$2,509	\$1,802	\$918	\$1,071	\$579	\$918	\$547	\$422	\$274	\$221	\$120	*	\$0	\$1,047	
50-54	159	273	225	122	86	111	43	16	14	5	1	0	0	1,055
\$2,958	\$2,704	\$2,738	\$2,452	\$2,370	\$1,297	\$860	\$498	\$390	\$165	*	\$0	\$0	\$2,392	
55-59	357	700	836	707	580	1,031	226	44	22	17	6	1	0	4,527
\$2,651	\$2,833	\$2,710	\$2,580	\$2,606	\$2,297	\$1,543	\$465	\$413	\$200	\$292	*	\$0	\$2,492	
60-64	443	747	809	691	755	2,192	1,057	89	53	15	13	1	2	6,867
\$1,878	\$1,928	\$1,917	\$2,011	\$1,967	\$2,187	\$1,818	\$835	\$388	\$356	\$325	*	\$201	\$1,968	
65-69	129	305	433	589	723	3,492	2,131	386	129	33	17	4	0	8,371
\$1,524	\$1,645	\$1,713	\$1,543	\$1,529	\$1,485	\$1,577	\$1,427	\$521	\$312	\$282	\$271	\$0	\$1,514	
70-74	26	33	67	63	116	2,631	3,814	967	500	97	26	13	4	8,357
\$1,582	\$1,698	\$1,806	\$1,859	\$1,684	\$1,375	\$1,206	\$1,544	\$1,149	\$550	\$332	\$267	\$404	\$1,302	
75-79	4	8	13	17	33	417	2,849	3,458	1,515	365	79	14	3	8,775
\$1,913	\$1,918	\$1,843	\$1,553	\$1,556	\$1,432	\$1,143	\$933	\$1,020	\$860	\$494	\$288	\$283	\$1,038	
80-84	0	6	5	7	10	64	424	2,711	3,947	828	245	27	7	8,281
\$0	\$2,171	\$1,995	\$838	\$1,560	\$1,526	\$1,225	\$880	\$733	\$884	\$643	\$400	\$216	\$826	
85-89	0	1	1	3	2	15	79	347	2,352	2,075	412	33	8	5,328
\$0	*	*	*	\$965	\$1,853	\$1,094	\$1,139	\$904	\$667	\$599	\$684	\$469	\$665	
90-94	0	0	1	0	0	1	9	31	260	1,115	812	82	14	2,325
\$0	\$0	\$0	*	\$0	\$0	*	\$1,021	\$884	\$683	\$604	\$579	\$500	\$541	
95 & Over	0	0	0	0	0	0	0	1	7	68	310	119	16	521
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	*	\$588	\$540	\$624	\$527	\$620	
Total	1,137	2,089	2,398	2,208	2,315	10,012	10,649	8,056	8,808	4,624	1,923	295	54	54,568
\$2,235	\$2,287	\$2,228	\$2,076	\$1,977	\$1,685	\$1,329	\$1,006	\$784	\$665	\$604	\$472	\$474	\$1,324	

Males 23,326  
Females 31,242

\*Monthly benefit omitted for privacy reasons

**Age and Years Retired Distribution of All Annuitant Members  
(Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

**PERS Plan 2:**  
**Attained Age**

	Attained Years Retired										Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	0
Under 50	8	16	22	7	10	12	3	0	0	0	0	0	0	78
50-54	\$172	\$155	\$232	\$136	\$182	\$97	\$130	\$0	\$0	\$0	\$0	\$0	\$0	\$170
55-59	8	26	30	28	19	42	11	0	0	0	0	0	0	164
60-64	\$354	\$266	\$226	\$200	\$186	\$225	\$287	\$0	\$0	\$0	\$0	\$0	\$0	\$233
65-69	37	81	68	59	41	112	14	1	0	0	0	0	0	413
70-74	\$490	\$577	\$456	\$356	\$319	\$216	\$162	*	\$0	\$0	\$0	\$0	\$0	\$380
75-79	107	184	125	82	93	222	29	1	0	0	0	0	0	843
80-84	\$1,137	\$879	\$754	\$584	\$493	\$329	\$193	*	\$0	\$0	\$0	\$0	\$0	\$653
85-89	481	899	865	803	693	406	69	8	0	0	0	0	0	4,224
90-94	\$926	\$853	\$827	\$775	\$734	\$618	\$246	\$170	\$0	\$0	\$0	\$0	\$0	\$788
95 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0	3,601
<b>Total</b>	<b>682</b>	<b>1,300</b>	<b>1,244</b>	<b>1,091</b>	<b>1,184</b>	<b>4,294</b>	<b>1,748</b>	<b>521</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,106</b>
Average:		Age	70.2								Males	5,354		
		Years Retired	5.8								Females	6,752		

\*Monthly benefit omitted for privacy reasons

**Age and Years Retired Distribution of All Annuitant Members  
(Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

PERS Plan 3:		Attained Years Retired										Total		
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over
Attained Age	Under 50	1	2	0	0	0	0	0	0	0	0	0	0	4
50-54	*	*	\$123	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$96
55-59	22	32	11	0	0	0	0	0	0	0	0	0	0	8
60-64	30	55	16	0	0	0	0	0	0	0	0	0	0	\$232
65-69	8	22	5	0	0	0	0	0	0	0	0	0	0	65
70-74	3	3	2	0	0	0	0	0	0	0	0	0	0	\$283
75-79	0	0	0	0	0	0	0	0	0	0	0	0	0	101
80-84	0	0	0	0	0	0	0	0	0	0	0	0	0	\$406
85-89	0	1	0	0	0	0	0	0	0	0	0	0	0	\$615
90-94	0	0	0	0	0	0	0	0	0	0	0	0	0	*
95 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
<b>Total</b>	<b>66</b>	<b>119</b>	<b>37</b>	<b>0</b>	<b>222</b>									
Average:	Years Retired	Age	61.3	\$389	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$401

\*Monthly benefit omitted for privacy reasons

**Age and Years Retired Distribution of All Annuitant Members  
(Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

**TRS Plan 1:**

	Attained Age	Attained Years Retired										Total			
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	Total
Under 50	1	3	1	3	3	3	10	8	5	3	1	0	0	0	38
	*	\$2,299	*	\$1,810	\$1,174	\$1,087	\$1,128	\$435	\$803	*	\$0	\$0	\$0	\$0	\$1,153
50-54	198	165	69	13	14	37	22	3	4	3	2	0	0	0	530
	\$2,861	\$2,809	\$2,691	\$2,041	\$1,895	\$1,272	\$969	\$562	\$706	\$377	\$764	\$0	\$0	\$0	\$2,536
55-59	605	655	827	845	598	734	109	24	10	2	3	2	0	0	4,414
	\$2,678	\$2,654	\$2,470	\$2,324	\$2,174	\$2,115	\$1,404	\$634	\$459	\$584	\$671	\$668	\$0	\$0	\$2,355
60-64	409	500	582	731	713	2,655	834	50	20	13	5	4	1	1	6,517
	\$1,938	\$1,894	\$1,821	\$1,811	\$1,809	\$1,982	\$1,764	\$905	\$506	\$340	\$690	\$571	*	*	\$1,874
65-69	71	96	140	236	335	2,435	2,079	285	77	28	13	2	0	0	5,797
	\$2,130	\$1,985	\$2,110	\$1,922	\$1,752	\$1,539	\$1,777	\$1,531	\$747	\$315	\$329	\$599	\$0	\$0	\$1,661
70-74	11	10	17	36	46	920	2,527	1,301	455	63	10	0	1	1	5,397
	\$1,863	\$1,948	\$1,786	\$1,981	\$1,735	\$1,783	\$1,536	\$1,561	\$1,195	\$630	\$499	\$0	*	*	\$1,549
75-79	0	0	5	4	7	145	968	1,853	1,430	188	19	0	0	0	4,619
	\$0	\$0	\$1,684	\$2,614	\$1,566	\$1,719	\$1,588	\$1,189	\$1,294	\$906	\$563	\$0	\$0	\$0	\$1,310
80-84	0	0	1	0	0	8	136	752	1,758	633	71	4	0	0	3,363
	\$0	\$0	*	\$0	\$0	\$1,298	\$1,531	\$1,234	\$1,017	\$1,101	\$768	\$787	\$0	\$0	\$1,098
85-89	0	1	0	0	0	2	20	103	714	1,108	269	8	1	1	2,226
	\$0	*	\$0	\$0	\$0	\$1,933	\$1,489	\$1,191	\$1,052	\$868	\$996	\$725	*	*	\$963
90-94	0	0	0	0	0	0	2	9	42	525	627	45	10	10	1,260
	\$0	\$0	\$0	\$0	\$0	\$0	\$1,458	\$1,248	\$1,091	\$985	\$891	\$864	\$760	\$0	\$938
95 & Over	0	0	0	0	0	0	0	0	1	20	272	153	17	17	463
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,058	\$1,089	\$744	\$706	\$0	\$959
<b>Total</b>	<b>1,295</b>	<b>1,430</b>	<b>1,642</b>	<b>1,868</b>	<b>1,716</b>	<b>6,946</b>	<b>6,705</b>	<b>4,385</b>	<b>4,514</b>	<b>2,584</b>	<b>1,291</b>	<b>218</b>	<b>30</b>	<b>34,624</b>	
	<b>\$2,435</b>	<b>\$2,355</b>	<b>\$2,209</b>	<b>\$2,064</b>	<b>\$1,922</b>	<b>\$1,803</b>	<b>\$1,642</b>	<b>\$1,322</b>	<b>\$1,120</b>	<b>\$938</b>	<b>\$933</b>	<b>\$763</b>	<b>\$702</b>	<b>\$1,603</b>	
Average:		Age	70.7								Males	15,094			
		Years Retired	12.7								Females	19,530			

\*Monthly benefit omitted for privacy reasons

**Age and Years Retired Distribution of All Annuitant Members  
(Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

**TRS Plan 2:**  
**Attained Age**

	Under 50	Attained Years Retired										Total			
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	Total
50-54	\$0 * \$104 *	\$354 \$104 *	\$0 1 *	0 1 *	1 3 *	4 * \$279	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	9 \$261
55-59	\$7 7	\$626 \$1,021	\$137 \$816	2 1	1 0	3 0	5 4	1 1	0 0	0 0	0 0	0 0	0 0	0 0	14 \$266
60-64	\$785 \$1,190	\$626 \$1,061	\$137 \$1,021	89 89	100 100	82 82	47 47	7 7	0 0	0 0	0 0	0 0	0 0	0 0	25 \$542
65-69	\$85 \$1,279	\$1,065 \$1,214	\$1,214 \$1,071	98 98	18 9	12 9	18 12	3 18	0 3	0 0	0 0	0 0	0 0	0 0	112 \$112
70-74	\$1,548	\$986 \$1,287	\$1,287 \$1,329	2 9	10 10	10 26	251 26	11 11	1 1	0 0	0 0	0 0	0 0	0 0	508 \$985
75-79	\$2 2	0 0	0 1	4 1	4 1	35 4	68 4	1 35	0 68	0 1	0 0	0 0	0 0	0 0	113 \$1,107
80-84	\$1,140 \$866	\$866 \$866	\$0 0	0 0	0 0	\$659 *	\$991 *	\$825 *	\$825 *	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	876 \$876
85-89	0 0	0 0	0 0	0 0	0 0	0 0	0 2	0 6	8 10	0 8	0 0	0 0	0 0	0 0	24 \$714
90-94	0 0	0 0	0 0	0 0	0 0	0 0	\$500 \$500	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	500 \$500
95 & Over	0 0	0 0	0 0	0 0	0 0	0 0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	0 0
<b>Total</b>	<b>\$1,227</b>	<b>\$1,006</b>	<b>\$1,146</b>	<b>\$1,061</b>	<b>\$955</b>	<b>\$921</b>	<b>\$752</b>	<b>\$480</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>1,127 \$991</b>

Average:  
Years Retired      Age      68.6      4.5

\*Monthly benefit omitted for privacy reasons

**Age and Years Retired Distribution of All Annuitant Members  
(Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

**TRS Plan 3:**

	Attained Age	Attained Years Retired										Total			
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 50	0	5	2	2	1	0	0	0	0	0	0	0	0	0	10
50-54	\$0	\$130	\$293	\$149	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$166
54*	2	1	3	2	2	3	0	0	0	0	0	0	0	0	13
55-59	\$168	*	\$163	\$136	\$182	\$137	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$163
59	34	28	29	17	9	7	0	0	0	0	0	0	0	0	124
60-64	\$358	\$268	\$276	\$270	\$209	\$177	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285
64	35	37	31	21	29	39	0	0	0	0	0	0	0	0	192
65-69	\$610	\$534	\$421	\$377	\$344	\$284	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$433
69	44	30	32	24	22	29	0	0	0	0	0	0	0	0	181
70-74	\$647	\$626	\$526	\$531	\$570	\$445	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$565
74	3	0	1	0	3	11	0	0	0	0	0	0	0	0	18
75-79	\$441	\$0	*	\$0	\$839	\$573	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$577
79	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
80-84	\$0	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	*	*
84	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
85-89	\$0	\$0	\$0	\$0	\$0	\$185	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$185
89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90-94	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	118	102	98	66	66	91	0	0	0	0	0	0	0	0	541
	\$539	\$463	\$400	\$391	\$416	\$355	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$435
Average:		Age	62.3									Males	141		
		Years Retired	2.4									Females	400		

\*Monthly benefit omitted for privacy reasons

**SERS Plan 2:**  
**Age and Years Retired Distribution of All Annuitant Members**  
**(Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

Attained Age	Attained Years Retired									Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	
Under 50	3	2	1	1	0	0	0	0	0	0
	\$125	\$160	*	*	\$0	\$0	\$0	\$0	\$0	\$0
50-54	3	4	2	3	1	0	0	0	0	0
	\$136	\$191	\$248	\$125	*	\$0	\$0	\$0	\$0	\$143
55-59	10	13	7	11	3	0	0	0	0	13
	\$483	\$323	\$247	\$154	\$100	\$0	\$0	\$0	\$0	\$165
60-64	38	66	31	21	4	0	0	0	0	44
	\$718	\$562	\$515	\$306	\$396	\$0	\$0	\$0	\$0	\$290
65-69	148	192	167	151	37	0	0	0	0	160
	\$582	\$597	\$594	\$548	\$642	\$0	\$0	\$0	\$0	\$552
70-74	15	38	33	42	17	0	0	0	0	695
	\$429	\$384	\$451	\$471	\$410	\$0	\$0	\$0	\$0	\$585
75-79	3	6	7	9	4	0	0	0	0	145
	\$414	\$285	\$343	\$332	\$611	\$0	\$0	\$0	\$0	\$432
80-84	1	1	0	1	0	0	0	0	0	29
	*	*	\$0	*	\$0	\$0	\$0	\$0	\$0	\$372
85-89	0	1	0	0	0	0	0	0	0	3
	\$0	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$369
90-94	0	0	0	0	0	0	0	0	0	1
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	*
95 & Over	0	0	0	0	0	0	0	0	0	0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>221</b>	<b>323</b>	<b>248</b>	<b>239</b>	<b>66</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,097</b>
	<b>\$576</b>	<b>\$540</b>	<b>\$544</b>	<b>\$478</b>	<b>\$533</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$534</b>

Average:  
 Years Retired      Age      66.6  
 1.7

\*Monthly benefit omitted for privacy reasons

Males      375  
 Females      722

## **Age and Years Retired Distribution of All Annuitant Members (Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

Average:

<sup>a</sup>Monthly benefit committed for privacy reasons

**Age and Years Retired Distribution of All Annuitant Members  
(Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

Attained Age		Attained Years Retired										Total				
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over		
Under 50	1	2	3	2	3	2	19	13	9	2	5	2	0	0	61	
	*	\$2,654	\$2,949	\$2,867	\$3,871	\$2,683	\$2,011	\$2,217	\$1,107	\$1,089	\$1,335	\$0	\$0	\$0	\$2,305	
50-54	18	50	55	29	58	137	90	66	48	15	1	0	0	0	567	
	\$3,528	\$3,615	\$3,428	\$3,162	\$2,870	\$2,932	\$2,602	\$2,444	\$2,148	\$2,037	*	\$0	\$0	\$0	\$2,861	
55-59	29	80	76	111	115	693	311	183	128	108	14	0	0	0	1,848	
	\$3,714	\$3,559	\$3,703	\$3,561	\$3,407	\$2,998	\$2,723	\$2,401	\$2,273	\$2,248	\$2,104	\$0	\$0	\$0	\$2,916	
60-64	10	20	22	41	52	507	609	218	161	126	48	0	0	0	1,814	
	\$4,997	\$4,308	\$3,852	\$3,627	\$3,684	\$3,319	\$2,811	\$2,599	\$2,332	\$2,311	\$2,151	\$0	\$0	\$0	\$2,917	
65-69	2	1	4	2	5	125	318	335	176	128	61	0	0	0	1,157	
	\$4,849	*	\$3,436	\$3,517	\$4,601	\$3,486	\$3,192	\$2,704	\$2,454	\$2,481	\$2,284	\$0	\$0	\$0	\$2,856	
70-74	0	0	0	0	2	23	81	214	343	158	111	0	0	0	932	
	\$0	\$0	\$0	\$0	\$0	\$4,330	\$3,679	\$3,539	\$3,003	\$2,574	\$2,579	\$2,412	\$0	\$0	\$0	\$2,769
75-79	0	0	0	0	0	2	22	81	209	359	155	0	0	0	828	
	\$0	\$0	\$0	\$0	\$0	\$6,255	\$3,303	\$3,275	\$2,920	\$2,778	\$2,483	\$0	\$0	\$0	\$2,830	
80-84	0	0	0	0	0	0	4	12	69	201	311	1	0	0	598	
	\$0	\$0	\$0	\$0	\$0	\$0	\$4,876	\$3,398	\$2,975	\$2,863	\$2,549	*	\$0	\$0	\$2,733	
85-89	0	0	0	0	0	0	1	1	13	55	152	1	0	0	223	
	\$0	\$0	\$0	\$0	\$0	\$0	*	*	\$2,454	\$2,652	\$2,534	*	\$0	\$0	\$0	\$2,564
90-94	0	0	0	0	0	0	0	0	0	1	11	51	1	0	64	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	*	\$2,979	\$2,376	*	\$0	\$0	\$0	\$2,524
95 & Over	0	0	0	0	0	0	0	0	0	4	13	1	0	0	18	
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,615	\$2,657	*	\$0	\$0	\$0	\$2,523
<b>Total</b>	<b>60</b>	<b>153</b>	<b>160</b>	<b>186</b>	<b>234</b>	<b>1,506</b>	<b>1,449</b>	<b>1,119</b>	<b>1,150</b>	<b>919</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>8,110</b>		
	<b>\$3,893</b>	<b>\$3,679</b>	<b>\$3,608</b>	<b>\$3,502</b>	<b>\$3,373</b>	<b>\$3,151</b>	<b>\$2,909</b>	<b>\$2,721</b>	<b>\$2,556</b>	<b>\$2,613</b>	<b>\$2,462</b>	<b>\$1,373</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,846</b>	

Average:  
Years RetiredAge  
65.9  
16.6

\*Monthly benefit omitted for privacy reasons

Males  
6,782  
Females  
1,328

**Age and Years Retired Distribution of All Annuitant Members  
(Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

**LEOFF Plan 2:**  
**Attained Age**

	Under 50	Attained Years Retired										Total			
		0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	Total
	1	4	4	0	4	0	0	0	0	0	0	0	0	0	13
	*	\$1,060	\$831	\$0	\$371	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$847
50-54	28	24	6	6	4	0	1	0	0	0	0	0	0	0	69
	\$2,045	\$1,978	\$1,589	\$1,415	\$1,760	\$0	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,888
55-59	17	33	44	34	36	3	0	1	0	0	0	0	0	0	168
	\$2,153	\$1,973	\$1,543	\$1,555	\$1,384	\$1,029	\$0	*	\$0	\$0	\$0	\$0	\$0	\$0	\$1,640
60-64	9	15	16	8	7	36	1	0	0	0	0	0	0	0	92
	\$2,016	\$1,427	\$1,463	\$2,412	\$1,523	\$965	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,397
65-69	4	3	7	3	7	24	9	0	0	0	0	0	0	0	57
	\$1,765	\$933	\$1,533	\$1,040	\$1,384	\$1,032	\$622	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,118
70-74	0	0	0	0	1	12	7	1	1	0	0	0	0	0	22
	\$0	\$0	\$0	\$0	*	\$1,349	\$951	*	*	\$0	\$0	\$0	\$0	\$0	\$1,106
75-79	0	0	0	0	0	0	0	4	5	0	0	0	0	0	9
	\$0	\$0	\$0	\$0	\$0	\$0	\$891	\$680	\$0	\$0	\$0	\$0	\$0	\$0	\$774
80-84	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	*	\$0	\$0	\$0	\$0	\$0	\$0	*
85-89	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	\$0	\$0	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	*
90-94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
95 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>59</b>	<b>79</b>	<b>78</b>	<b>51</b>	<b>59</b>	<b>75</b>	<b>22</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>432</b>
Average:		Age	59.5												
		Years Retired	3.5												
	Males														
	Females														

\*Monthly benefit omitted for privacy reasons

**Age and Years Retired Distribution of All Annuitant Members  
(Number of All Annuitant Members and Average Monthly Benefit)**

(Continued)

		Attained Years Retired																											
		0		1		2		3		4		5-9		10-14		15-19		20-24		25-29		30-34		35-39		40 & Over		Total	
		Under 50	8	4	1	0	1	0	1	0	1	3	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
50-54	\$3,211	\$3,319	*	\$0	\$0	*	\$0	\$1,683	\$622	\$923	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,038		
55-59	\$3,441	\$3,784	\$3,724	\$4,044	\$3,411	\$7	24	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	
60-64	\$3,424	\$3,502	\$3,872	\$4,267	\$3,644	\$3,281	\$2,860	*	\$0	\$517	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,210		
65-69	0	0	0	0	0	0	0	15	63	35	15	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203	
70-74	0	1	1	0	0	0	0	\$3,624	\$3,064	\$2,843	\$1,571	\$518	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,066	
75-79	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	135
80-84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$2,773	
85-89	\$0	\$0	\$0	*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,022
90-94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
95 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
<b>Total</b>	<b>22</b>	<b>23</b>	<b>34</b>	<b>31</b>	<b>32</b>	<b>198</b>	<b>194</b>	<b>80</b>	<b>113</b>	<b>44</b>	<b>30</b>	<b>16</b>	<b>6</b>	<b>823</b>	<b>Males</b>	<b>701</b>	<b>Females</b>	<b>122</b>	<b>\$2,759</b>										
Average:		Years Retired	Age	64.3	13.2																								

\*Monthly benefit omitted for privacy reasons

## Historical Data

Historical Data											
(Dollars in millions)	2004			2003			2002			2001 <sup>1</sup>	
	Plan 1	Plan 2/3 <sup>2</sup>	Plan 1	Plan 2/3 <sup>2</sup>	Plan 1	Plan 2/3 <sup>2</sup>	Plan 1	Plan 2	Plan 1	Plan 2	1999
<b>PERS</b>											
<b>Contribution Information</b>											
Employer Rate	5.65%	5.65%	5.73%	5.73%	3.78%	3.78%	2.05%	2.05%	1.63%	1.63%	3.21%
Employee Rate	6.00%	3.42%	6.00%	3.38%	6.00%	2.63%	6.00%	1.41%	6.00%	1.05%	6.00%
Funded Status											1.70%
Credited Projected Liability	\$12,182	\$8,504	\$12,431	\$7,658	\$11,682	\$6,777	\$11,291	\$6,158	\$11,337	\$5,671	\$11,265
Market Value of Assets	\$9,128	\$10,776	\$8,730	\$9,461	\$8,236	\$8,246	\$9,373	\$9,443	\$10,744	\$10,392	\$11,082
Actuarial Value of Assets	\$9,928	\$11,431	\$10,227	\$10,842	\$10,757	\$10,701	\$10,990	\$11,032	\$11,111	\$10,749	\$10,456
Unfunded Liability	\$2,254	(\$2,927)	\$2,204	(\$3,184)	\$925	(\$3,924)	\$301	(\$4,874)	\$227	(\$5,078)	\$809
Funded Ratio	81.50%	134.42%	82.27%	141.58%	92.08%	157.89%	97.00%	179.00%	98.00%	190.00%	93.00%
Participant Data											189.00%
Number of Actives	17,829	138,427	19,740	134,810	21,737	132,448	23,981	128,955	25,833	126,428	28,168
Total Annual Salaries	\$863	\$6,221	\$945	\$5,930	\$1,023	\$5,661	\$1,085	\$5,249	\$1,132	\$4,964	\$1,184
Number of Terminated Vested	2,993	18,038	3,142	16,859	3,280	15,872	3,310	15,102	3,220	14,094	3,295
Number of Terminated, Not Vested	5,847	78,411	6,525	78,853	7,010	77,151	8,019	76,733	7,704	71,330	7,628
Number of Retirees and Beneficiaries	54,568	12,328	54,372	10,990	54,006	9,750	53,538	8,651	53,161	7,927	52,515
Total Annual Benefits	\$868	\$96	\$816	\$81	\$760	\$68	\$705	\$57	\$663	\$49	\$609
Assumptions											
Valuation Interest Rate	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	5.90%	5.90%	7.50%	7.50%	7.50%
Salary Increase	4.80%	6.20%	4.80%	6.20%	4.80%	6.30%	3.60%	4.70%	4.00%	4.00%	4.00%
Inflation <sup>3</sup>	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Growth in Membership	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	0.94%	0.94%	1.25%	1.25%	1.25%
Actuarial Experience											
Return on Market Value	13.93%	13.75%	14.97%	15.05%	(5.83%)	(6.20%)	(9.68%)	(9.80%)	0.49%	0.39%	18.28%
Return on Actuarial Value	4.70%	5.30%	1.50%	1.50%	1.60%	1.90%	2.10%	1.90%	10.20%	9.90%	16.70%
Salary Increase	2.30%	3.70%	2.80%	4.20%	5.10%	6.40%	3.90%	4.90%	4.90%	6.00%	3.70%
Inflation	1.41%	1.41%	1.81%	1.81%	3.55%	3.55%	3.75%	3.75%	3.10%	3.10%	2.63%
Growth in Membership	1.10%	1.10%	0.24%	0.24%	0.82%	0.82%	0.44%	0.44%	1.84%	1.84%	2.36%
COLA <sup>4</sup>	\$1.21	3.00%	\$1.18	3.00%	\$1.14	3.00%	\$1.11	3.00%	\$1.08	3.00%	\$1.05

Note: See footnotes at the end of this section

## Historical Data

(Continued)

	TRS	Historical Data										1999
		2004	2003	2002	Plan 1	Plan 2/3 <sup>2</sup>	Plan 1	Plan 2/3 <sup>2</sup>	Plan 1	Plan 2/3 <sup>2</sup>	Plan 1	
<b>Contribution Information</b>												
Employer Rate	5.96%	5.74%	6.74%	6.00%	2.48%	3.19%	1.71%	6.00%	2.22%	2.38%	5.38%	5.38%
Employee Rate	6.00%	2.65%	6.00%	2.48%	6.00%	1.71%	6.00%	1.20%	6.00%	1.29%	6.00%	2.15%
<b>Funded Status</b>												
Credited Projected Liability	\$9,920	\$2,711	\$10,207	\$2,552	\$9,602	\$2,085	\$9,320	\$1,797	\$9,376	\$1,654	\$9,359	\$1,547
Market Value of Assets	\$7,681	\$3,789	\$7,358	\$3,315	\$6,962	\$2,877	\$7,985	\$3,045	\$9,805	\$3,397	\$9,002	\$3,006
Actuarial Value of Assets	\$8,728	\$4,138	\$9,086	\$3,949	\$9,366	\$3,800	\$9,342	\$3,547	\$9,372	\$3,250	\$8,696	\$2,908
Unfunded Liability	\$1,192	(\$1,427)	\$1,121	(\$1,397)	\$236	(\$1,715)	(\$22)	(\$1,750)	\$4	(\$1,596)	\$663	(\$1,361)
Funded Ratio	87.99%	152.63%	89.02%	154.74%	97.54%	182.25%	100.00%	197.00%	100.00%	196.00%	93.00%	188.00%
<b>Participant Data</b>												
Number of Actives	9,862	56,772	11,175	54,900	12,456	53,607	13,971	52,249	17,222	46,636	18,737	43,947
Total Annual Salaries	\$616	\$2,878	\$692	\$2,723	\$741	\$2,523	\$800	\$2,350	\$957	\$2,043	\$984	\$1,819
Number of Terminated Vested	1,475	5,271	1,647	4,911	1,819	4,638	1,990	4,072	1,976	3,441	2,071	3,099
Number of Terminated, Not Vested	720	3,931	776	4,169	814	4,378	949	5,041	965	5,404	989	5,701
Number of Retirees and Beneficiaries	34,624	1,668	33,855	1,342	33,148	1,106	32,195	912	29,839	611	28,920	448
Total Annual Benefits	\$666	\$16	\$625	\$13	\$587	\$10	\$544	\$8	\$463	\$5	\$428	\$4
<b>Assumptions</b>												
Valuation Interest Rate	8.00%	8.00%	8.00%	8.00%	8.00%	10.10%	10.10%	7.50%	7.50%	7.50%	7.50%	7.50%
Salary Increase	4.80%	6.60%	4.80%	6.70%	4.80%	6.70%	6.00%	8.60%	4.00%	4.00%	4.00%	4.00%
Inflation <sup>3</sup>	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Growth in Membership	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	1.13%	1.13%	0.90%	0.90%	0.90%	0.90%
Actuarial Experience												
Return on Market Value	13.93%	13.74%	14.97%	15.11%	(5.77%)	(6.22%)	(12.39%)	(12.67%)	12.93%	12.98%	11.78%	11.92%
Return on Actuarial Value	3.40%	4.30%	3.50%	3.80%	6.70%	6.50%	6.80%	6.50%	11.90%	11.70%	14.70%	14.90%
Salary Increase	1.60%	3.40%	4.90%	6.60%	4.40%	5.80%	4.80%	6.80%	6.40%	8.40%	1.10%	1.10%
Inflation	1.41%	1.41%	1.81%	1.81%	3.55%	3.55%	3.75%	3.75%	3.10%	3.10%	2.63%	2.63%
Growth in Membership	0.85%	0.85%	0.02%	0.02%	(0.24%)	(0.24%)	3.70%	3.70%	1.87%	1.87%	1.38%	1.38%
COLA <sup>4</sup>	\$1.21	3.00%	\$1.18	3.00%	\$1.14	3.00%	\$1.11	3.00%	\$1.08	3.00%	\$1.05	2.63%-3%

Note: See footnotes at the end of this section

**Historical Data**

(Continued)

	(Dollars in millions)	Historical Data									
		2004	2003	2002	2001 <sup>1</sup>	2000	Plan 1	Plan 2/3 <sup>2</sup>	Plan 1	Plan 2/3 <sup>2</sup>	Plan 1
<b>SERS Contribution Information</b>											
Employer Rate	N/A	5.64%	N/A	7.56%	N/A	3.64%	N/A	1.74%	N/A	1.22%	N/A
Employee Rate	N/A	3.41%	N/A	3.51%	N/A	2.49%	N/A	1.10%	N/A	0.46%	N/A
<b>Funded Status</b>											
Credited Projected Liability	N/A	\$1,191	N/A	\$1,121	N/A	\$899	N/A	\$747	N/A	\$1,091	N/A
Market Value of Assets	N/A	\$1,529	N/A	\$1,339	N/A	\$1,157	N/A	\$1,230	N/A	\$1,790	N/A
Actuarial Value of Assets	N/A	\$1,630	N/A	\$1,546	N/A	\$1,519	N/A	\$1,472	N/A	\$1,853	N/A
Unfunded Liability	N/A	(\$439)	N/A	(\$425)	N/A	(\$620)	N/A	(\$724)	N/A	(\$762)	N/A
Funded Ratio	N/A	136.88%	N/A	137.87%	N/A	169.02%	N/A	197.00%	N/A	170.00%	N/A
<b>Participant Data</b>											
Number of Actives	N/A	49,854	N/A	49,214	N/A	49,791	N/A	48,347	N/A	47,725	N/A
Total Annual Salaries	N/A	\$1,168	N/A	\$1,133	N/A	\$1,086	N/A	\$1,004	N/A	\$1,012	N/A
Number of Terminated Vested	N/A	4,463	N/A	3,550	N/A	2,545	N/A	1,566	N/A	733	N/A
Number of Terminated, Not Vested	N/A	4,588	N/A	4,232	N/A	3,553	N/A	2,717	N/A	1,461	N/A
Number of Retirees and Beneficiaries	N/A	1,578	N/A	1,042	N/A	622	N/A	269	N/A	27	N/A
Total Annual Benefits	N/A	\$8	N/A	\$5	N/A	\$3	N/A	\$1	N/A	\$0	N/A
<b>Assumptions</b>											
Valuation Interest Rate	N/A	8.00%	N/A	8.00%	N/A	8.00%	N/A	5.90%	N/A	N/A	N/A
Salary Increase	N/A	6.10%	N/A	6.20%	N/A	6.20%	N/A	3.40%	N/A	N/A	N/A
Inflation <sup>3</sup>	N/A	3.50%	N/A	3.50%	N/A	3.50%	N/A	3.50%	N/A	N/A	N/A
Growth in Membership	N/A	1.25%	N/A	1.25%	N/A	1.25%	N/A	0.94%	N/A	N/A	N/A
<b>Actuarial Experience</b>											
Return on Market Value	N/A	13.74%	N/A	15.12%	N/A	(6.26%)	N/A	(8.66%)	N/A	N/A	N/A
Return on Actuarial Value	N/A	5.10%	N/A	1.30%	N/A	2.90%	N/A	2.50%	N/A	N/A	N/A
Salary Increase	N/A	2.80%	N/A	5.80%	N/A	6.30%	N/A	3.40%	N/A	N/A	N/A
Inflation	N/A	1.41%	N/A	1.81%	N/A	3.55%	N/A	3.75%	N/A	N/A	N/A
Growth in Membership	N/A	1.30%	N/A	(1.16%)	N/A	2.99%	N/A	1.30%	N/A	N/A	N/A
COLA <sup>4</sup>	N/A	3.00%	N/A	3.00%	N/A	3.00%	N/A	3.00%	N/A	N/A	N/A

Note: See footnotes at the end of this section

## Historical Data

(Continued)

	2004						2003						2002						2001 <sup>1</sup>						2000						1999					
	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2						
<b>LEOFF Contribution Information</b>																																				
Employer Rate	0.00%	4.57%	0.00%	4.32%	0.00%	3.84%	0.00%	3.03%	0.00%	2.41%	0.00%	3.46%																								
State Rate	0.00%	3.03%	0.00%	2.88%	0.00%	2.57%	0.00%	2.02%	0.00%	1.61%	0.00%	2.31%																								
Employee Rate	0.00%	7.60%	0.00%	7.20%	0.00%	6.41%	0.00%	5.05%	0.00%	4.02%	0.00%	5.77%																								
<b>Funded Status</b>																																				
Credited Projected Liability	\$4,281	\$2,521	\$4,282	\$2,194	\$4,265	\$1,937	\$4,160	\$1,668	\$4,010	\$1,528	\$4,136																									
Market Value of Assets	\$4,695	\$2,984	\$4,380	\$2,541	\$4,060	\$2,136	\$4,578	\$2,210	\$5,260	\$2,378	\$5,460	\$2,288																								
Actuarial Value of Assets	\$4,666	\$2,947	\$4,803	\$2,740	\$5,095	\$2,646	\$5,369	\$2,576	\$5,440	\$2,459	\$5,150	\$2,163																								
Unfunded Liability	(\$385)	(\$426)	(\$521)	(\$547)	(\$830)	(\$709)	(\$1,209)	(\$907)	(\$1,430)	(\$931)	(\$1,014)	(\$755)																								
Funded Ratio	109.00%	116.89%	112.18%	124.91%	119.45%	136.62%	129.00%	154.00%	136.00%	161.00%	125.00%	154.00%																								
<b>Participant Data</b>																																				
Number of Actives	848	14,754	991	14,560	1,147	14,011	1,315	13,585	1,499	13,133	1,743	12,713																								
Total Annual Salaries	\$64	\$1,020	\$71	\$967	\$80	\$902	\$87	\$831	\$95	\$780	\$106	\$725																								
Number of Terminated Vested	7	521	14	439	22	376	29	303	31	248	40	216																								
Number of Terminated, Not Vested	70	1,233	84	1,186	90	1,137	94	1,051	92	940	93	875																								
Number of Retirees and Beneficiaries	8,110	432	8,054	316	7,987	244	7,894	184	7,780	143	7,623	100																								
Total Annual Benefits	\$277	\$8	\$270	\$5	\$262	\$3	\$248	\$2	\$235	\$2	\$221	\$1																								
<b>Assumptions</b>																																				
Valuation Interest Rate	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	5.90%	5.90%	5.90%	8.00%	8.00%	7.50%																								
Salary Increase	5.90%	7.60%	5.90%	7.70%	4.50%	7.80%	4.40%	5.80%	4.00%	4.00%	4.00%	4.00%																								
Inflation <sup>3</sup>	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%																								
Growth in Membership	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	0.94%	0.94%	1.25%	1.25%	1.25%																								
Actuarial Experience																																				
Return on Market Value	13.88%	13.64%	15.00%	15.13%	(5.88%)	(6.31%)	(9.65%)	(9.77%)	(0.49%)	0.37%	18.34%	18.54%																								
Return on Actuarial Value	2.90%	4.11%	(0.50%)	0.60%	(0.30%)	0.10%	2.10%	2.00%	10.20%	9.80%	17.00%	16.60%																								
Salary Increase	3.40%	5.20%	2.90%	4.80%	4.40%	7.00%	2.50%	4.60%	2.50%	5.90%	3.90%	3.90%																								
Inflation	1.41%	1.41%	1.81%	1.81%	1.81%	3.55%	3.55%	3.75%	3.75%	3.10%	3.10%	2.63%																								
Growth in Membership	0.33%	0.33%	2.59%	2.59%	1.73%	1.73%	1.83%	1.83%	1.22%	1.22%	4.33%	4.33%																								
COLA <sup>4</sup>	1.57%	3.00%	1.81%	3.00%	3.55%	3.00%	3.75%	3.75%	3.10%	3.10%	2.63%	2.63%																								

Note: See footnotes at the end of this section

**Historical Data**

(Continued)

	(Dollars in millions)	Historical Data									
		2004		2003		2002		2001 <sup>1</sup>		2000	
		Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2	Plan 1	Plan 2
<b>WSP</b>											
<b>Contribution Information</b>											
Employer Rate	5.22%	5.22%	4.51%	4.51%	0.00%	N/A	0.00%	N/A	0.00%	N/A	0.00%
Employee Rate	5.22%	5.22%	4.51%	4.51%	2.00%	N/A	2.00%	N/A	2.00%	N/A	7.00%
<b>Funded Status</b>											
Credited Projected Liability	\$560	N/A	\$540	N/A	\$508	N/A	\$483	N/A	\$468	N/A	\$417
Market Value of Assets	\$665	N/A	\$608	N/A	\$551	N/A	\$608	N/A	\$688	N/A	\$702
Actuarial Value of Assets	\$660	N/A	\$664	N/A	\$689	N/A	\$712	N/A	\$712	N/A	\$622
Unfunded Liability	(\$100)	N/A	(\$124)	N/A	(\$180)	N/A	(\$229)	N/A	(\$244)	N/A	(\$246)
Funded Ratio	117.82%	N/A	122.99%	N/A	135.49%	N/A	147.00%	N/A	152.00%	N/A	159.00%
<b>Participant Data</b>											
Number of Actives	997	60	1,045	34	1,035	N/A	1,027	N/A	1,013	N/A	968
Total Annual Salaries	\$62	\$3	\$65	\$1	\$63	N/A	\$60	N/A	\$58	N/A	\$56
Number of Terminated Vested	39	0	32	0	33	N/A	26	N/A	21	N/A	15
Number of Terminated, Not Vested	20	1	20	0	17	N/A	14	N/A	12	N/A	9
Number of Disabled Members <sup>5</sup>	61	0	61	0	62	N/A	63	N/A	63	N/A	67
Number of Retirees and Beneficiaries	762	0	735	0	718	N/A	696	N/A	672	N/A	647
Total Annual Benefits	\$27	\$0	\$25	\$0	\$24	N/A	\$22	N/A	\$20	N/A	\$19
<b>Assumptions</b>											
Valuation Interest Rate	8.00%	N/A	8.00%	N/A	8.00%	N/A	5.90%	N/A	8.00%	N/A	7.50%
Salary Increase	7.00%	N/A	7.00%	N/A	7.10%	N/A	5.10%	N/A	4.00%	N/A	4.00%
Inflation <sup>3</sup>	3.50%	N/A	3.50%	N/A	3.50%	N/A	3.50%	N/A	3.50%	N/A	3.50%
Growth in Membership	1.25%	N/A	1.25%	N/A	1.25%	N/A	0.94%	N/A	1.25%	N/A	1.25%
<b>Actuarial Experience</b>											
Return on Market Value	13.83%	N/A	15.03%	N/A	(5.99%)	N/A	(9.68%)	N/A	0.46%	N/A	18.36%
Return on Actuarial Value	3.20%	N/A	(0.20%)	N/A	(0.20%)	N/A	2.10%	N/A	10.10%	N/A	16.90%
Salary Increase	0.80%	N/A	3.90%	N/A	5.20%	N/A	3.90%	N/A	3.80%	N/A	7.20%
Inflation	1.41%	N/A	1.81%	N/A	3.55%	N/A	3.75%	N/A	3.10%	N/A	2.63%
Growth in Membership	(2.04%)	N/A	4.25%	N/A	0.78%	N/A	1.38%	N/A	4.65%	N/A	4.20%
COLA <sup>4</sup>	3.00%	N/A	3.00%	N/A	3.00%	N/A	3.00%	N/A	2.00%	N/A	2.00%

Note: See footnotes at the end of this section

### Footnotes for Historical Data Section

<sup>1</sup>For the 2001 valuation, the salary, interest, and growth rates were not annualized. They reflect the actual valuation period of 9 months (15 months for TRS).

<sup>2</sup>Plan 3 members do not contribute to the defined benefit plan

<sup>3</sup>Based on the assumption for prior year's CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bremerton, WA - All Items

<sup>4</sup>PERS 1 & TRS 1 are paid a Uniform COLA. Amounts are \$/month/year of service. Two gain sharing payments were made: \$0.10 on 7/1/1998, and \$0.28 on 1/1/2000.

LEOFF 1 COLA is exactly the CPI. All others are based on the CPI (3% maximum per year).

<sup>5</sup>WSP Disability Benefits are provided outside of pension funds

## Glossary

**Actuarial accrued liability:** Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the present value of fully projected benefits attributable to service credit that has been earned (or accrued) as of the valuation date.

**Actuarial gain or loss:** Experience of the plan, from one year to the next, which differs from that assumed will result in an actuarial gain or loss. For example, an actuarial gain would occur if assets earned 10% for a given year since the assumed interest rate in the valuation is 8%.

**Actuarial value of assets:** The value of pension plan investments and other property used by the actuary for the purpose of an actuarial valuation (sometimes referred to as valuation assets). It is common for actuaries to select an actuarial valuation method that smoothes the effects of short-term volatility in the market value of assets.

**Normal cost:** Computed differently under different funding methods, the normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year. The employer normal cost is the total normal cost of the plan reduced by employee contributions.

**Present value of credited projected benefits:** The actuarial accrued liability computed under the Projected Unit Credit (PUC) funding method.

**Present value of fully projected benefits:** Computed by projecting the total future benefit cash flow from the plan, using actuarial assumptions (i.e., probability of death, retirement, salary increases, etc.), and then discounting the cash flow to the valuation date using the valuation interest rate.

**Projected Unit Credit (PUC) Funding Method:** The PUC funding method is a standard actuarial funding method. The annual cost of benefits under PUC is comprised of two components:

- Normal cost; plus
- Amortization of the unfunded actuarial accrued liability.

The PUC normal cost is the estimated present value of projected benefits to be earned in the current plan year.

**Unfunded actuarial accrued liability:** The excess, if any, of the actuarial accrued liability over the actuarial value of assets. In other words, the present value of benefits earned to date that are not covered by plan assets.